CrossTalk

May 2025 *66 Years Of Service To Amateur Radio & Our Community* *Issue 66 : 05*

2025 Club Officers

President :	**Jonathan Pearce, WB2MNF**
Vice President :	**Ronald Block, NR2B**
Treasurer :	**John O'Connell, K2QA**
Recording Secretary :	**John Zaruba Jr, K2ZA**
Corresponding Secretary :	**Michael Resnick, N2WOQ**

Trustees - 4 Year Term

Charles Lanard, KD2EIB	**(2022-2025)**
Sheldon Parker, K2MEN	**(2023-2026)**
Len Rust, W2LJR	**(2024-2027)**
Earl Moore, KC2NCH	**(2025-2028)**

Directors - 3 Year Term

Chris Prioli, AD2CS	**(2023-2025)**	**Bill Price, NJ2S**	**(2024-2026)**
James Wright, N2GXJ	**(2023-2025)**	**Jeffrey Garth, WB2ZBN**	**(2025-2027)**
Al Arrison, KB2AYU	**(2024-2026)**	**Frank Romeo, N3PUU**	**(2025-2027)**

General Membership Meeting
Wednesday, May 7, 2025 @ 1900 Hours
In-Person & ZOOM : 914 7364 1808, 843147

License Testing Session
Thursday, May 8, 2025 @ 1900 Hours
W2MMD Clubhouse

Tech Saturday Forum
Saturday, May 10 & 17, 2025 @ 0900 Hours
W2MMD Clubhouse

Fox Hunt 33 - Spring Fox Hunt
Sunday, May 18, 2025 @ 1300 Hours
Somewhere In Gloucester County

Board of Directors Meeting
Wednesday, May 21, 2025 @ 1900 Hours
W2MMD Clubhouse

GCARC Family Picnic
Saturday, May 31, 2025 @ 1100 Hours
Red Bank Battlefield Park, National Park, NJ

Tuesday AfterNoon 2M Net @ 1200 Hours
Thursday Night 2M Net @ 2000 Hours

Monday & Thursday Night 40M Net @ 1930 Hours
7.175 MHz (- 5 or 10 kHz)

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Gloucester County Amateur Radio Club
2025 Family Picnic

WHEN : Saturday, May 31, 2025
WHO : All Club members, spouses and family members
WHERE : Red Bank Battlefield Park
Hessian Avenue Pavilion
100 Hessian Avenue
National Park, NJ 08063
TIME : 1100 - 1400 Hours

We have reserved the Main Pavilion at Red Bank Battlefield Park in National Park, NJ, from 11:00 AM to 2:00 PM on Saturday, May 31, 2025. This park is located across the Delaware River from the Philadelphia airport and Navy yard. The park offers some historical interest, including the James and Ann Whitall House, and some remnants of the original Fort Mercer. Consider this an opportunity, as Club members, for us and our families to "get out of the shack" for a while, to meet each other and socialize a bit in the sunshine of a great outdoor setting!

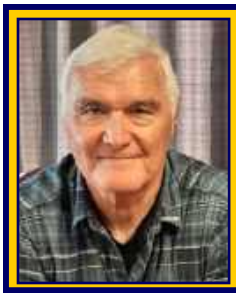
Just because we have the Main Pavilion rented for 3 hours doesn't mean you have to stay the whole time. You're welcome to drop in and stay for as long as you'd like while we have the pavilion rented.

As for the picnic, we'll have the basic hot dogs, burgers, buns, water, soda, and standard items like catsup, mustard, and buns, along with paper plates, silverware, cups, napkins, and similar supplies covered by the Club.

If you'd like, you can bring a little something extra to share with others, helping to keep the costs down. We'll have sign-up sheets for things like coolers, ice, chips, salads, and desserts available at the May Club meeting to help make sure we have everything covered without too much overlap.

We'll post updates to the Club website, and will have a chance to talk some more about the picnic at the upcoming May 7, 2025 General Membership Meeting.

If you would like to donate any side dishes, dessert, etc.
Please go to : https://registration.w2mmd.org/wpregp/gcarc-picnic



President's Letter
Jon Pearce, WB2MNF

May 2025

April was another active month for the Gloucester County Amateur Radio Club, with members coming together to tackle technical projects and gear up for summer events. Our motto, Learning Stuff. Building Stuff. Doing Stuff - Together!, shone through in the enthusiasm and collaboration at our recent gatherings. Let's recap some highlights and preview what's next.

April Tech Saturday : PCB Design Success

Chris Prioli, AD2CS, delivered an outstanding presentation at the April 5th Tech Saturday Forum, guiding attendees through the process of designing printed circuit boards (PCBs) for production. Using examples like a simple Raspberry Pi-based project and the dummy load/wattmeter design slated for May's build session, Chris demystified PCB creation. His clear explanations and practical demonstrations gave participants the confidence to start designing their own boards. If you missed it, don't worry - Chris's session set the stage for more hands-on opportunities this month.

May 10th Tech Saturday Forum : Building a Digital Wattmeter/Dummy Load

On May 10th, the first Saturday after our May 7th General Membership Meeting, **Chris Prioli, AD2CS**, will lead a hands-on Tech Saturday session to construct the digital wattmeter/dummy load project featured in the February issue of QST and reprinted in our April and May CrossTalks. This device, blending RF circuitry with an Arduino microcontroller, is a practical addition to any ham shack. With about a dozen participants already signed up, the session is nearly full, but Chris can accommodate more builders by adding a second session the following week if needed. Expect to wrap up in a single session, likely running into the early afternoon. Go to **https://registration.w2mmd.org/wpregp/gcarc-dummy-load-wattmeter-project-build** and complete the registration form.

GCARC Family Picnic

Mark your calendars for the GCARC Family Picnic on Saturday, May 31, 2025, from 11:00 AM to 2:00 PM at Red Bank Battlefield Park. This is our first picnic in several years, and it's shaping up to be a fantastic day of food, fun, and camaraderie. Further details are available in the May CrossTalk and will be announced at the May 7th General Membership Meeting, where we'll also look for sign-ups to attend and possibly bring something to share. Bring your family and friends for a relaxing afternoon by the Delaware River!

Field Day Preparations

Field Day is approaching on June 28-29, and **Jim Wright, N2GXJ**, is rallying the team for another memorable event. For new operators, Field Day is a chance to dive into the fast-paced world of HF contesting. To ease first-timers in, our June 7th Tech Saturday Forum will host an ***"Intro to Field Day for Newbies"*** session, covering the basics and offering a preview of what to expect.

President's Letter - Continued on page 4

President's Letter - Continued from page 3

This will double as an organizational meeting for all Field Day operators. Jim is also seeking volunteers for both operating and non-operating roles, so if you're interested, reach out to him at n2gxj@arrl.net to get involved.

DMR Repeater Now Operational

Thanks to the hard work of **Frank Romeo, N3PUU**, and **John Zaruba, K2ZA**, our DMR repeater at **Rowan University** is up and running on **440.10625 MHz (color code 1)**. Timeslot 1 supports most BrandMeister talk groups, while Timeslot 2, talk group 2, is dedicated to GCARC's local chat group, with talk group 9 for local calling. Many members have jumped on board with affordable OpenGD77 DMR radios, programming them for local frequencies. If you're curious about DMR, join the growing group of Club members exploring this mode - support is available at the Clubhouse and on our Discord channel.

Fox Hunting Antenna Build

We're considering a Tech Saturday Forum session, tentatively scheduled for July 12, 2025 (***Not July 5th***), to build tape measure Yagi antennas with attenuators, a popular project from last year, if there's sufficient interest. These portable antennas are perfect for fox hunting and other direction-finding activities. If you'd like to participate, let **Chris Prioli, AD2CS** (cpprioli@gmail.com) or me (president@w2mmd.org) know, and we'll confirm the date as we get closer.

Tower Refurbishment Progress

Al Arrison, KB2AYU, **Frank Romeo, N3PUU**, and **Earl Moore, KC2NCH**, are leading the charge on our 89-foot UHF/microwave tower, refurbishing pulleys and replacing cabling. Meanwhile, the 72-foot tower is in better shape and will soon support the VHF and lower-frequency UHF antennas currently on the tower trailer. Next steps include excavating trenches and installing underground piping for cables and grounding. These efforts will bring our new VHF station equipment online, enhancing our capabilities for contests and regular operations.

As we head into summer, the Club is overflowing with opportunities to learn, build, and connect. Whether you're designing PCBs, operating during Field Day, or enjoying the picnic, there's something for everyone. Keep sharing your ideas and expertise to help shape our community.

73 de Jon WB2MNF

International
FireFighters' Day
May 4th
International Firefighters' Day is observed each year on 4th May. On this date you are invited to remember the past firefighters who have died while serving our community or dedicated their lives to protecting the safety of us all. At the same time, we can show our support and appreciation to the firefighters world wide who continue to protect us so well throughout the year.
On the first Sunday in May at noon please Sound Off in respect of past firefighters.

Welcome New Club Members :

Joshua Boylan, KE2FNA, a Technician Class who lives in Pitman, NJ.
Dan Goulianos, KE2BPK, (Returning Member), a Technician Class who lives in Wenonah, NJ.
Stephen Jordan, KB2RGZ, (Returning Member), a General Class who lives in Franklinville, NJ.
Paul Marchetto, W2NKJ, a General Class who lives in Villanova, PA.

We are glad to have you as a member of the Club and hope to see you regularly at Club meetings, events, and activities. Hope to see you at the May 7th General Membership Meeting, either in-person or on ZOOM, the May 10th Tech Saturday Forum, Fox Hunt 33 on May 18th, the Board of Directors Meeting on May 21st, the Dinner at the Clubhouse on May 28th, and the GCARC Family Picnic on May 31st.

We also hope to "SEE" you on the "AIR" on the following nets :
Sunday Night Skywarn 2 Meter Net @ 1930 Hours.
Sunday Night ARES 2 Meter Net @ 2000 Hours.
Tuesday AfterNoon 2 Meter Net @ 1200 Hours.
Monday & Thursday Night 40 Meter Nets on 7.175 MHz (Minus 5 to 10 kHz) @ 1930 Hours.
Thursday Night Rag Chew 2 Meter Net @ 2000 Hours.

All 2 Meter nets are on our 147.180 MHz (PL 131.8) repeater or on EchoLink W2MMD-R.

Gloucester County Amateur Radio Club Elmers

We are still looking for some more Club Elmers. If you would to add your name to the Elmer's List, send your specialty to w2mmdgcarc@gmail.com. Here is what we have so far :

- **Tony Starr, K3TS : Antenna Construction; Contesting; CW Help and Training**
- **Ken Bozarth, KN2U : Antennas**
- **Jeff Welsh, KD2AZI : Boat Anchor Repair & Operation; Raspberry Pi; Arduino; Python; POTA; Mobile Installation & Operating**
- **Karl Frank, W2KBF : Digital Messaging (FLDIGI, WinLink)**
- **Lenny Rust, W2LJR : DMR Radios & Programming**
- **Ron Block, NR2B : Lightning protection & grounding**
- **Chris Prioli, AD2CS : Kit Building; Antenna Building; Radio Programming; PC and Electronic Troubleshooting; Ham Radio Licensing & Studying**
- **John Zaruba Jr, K2ZA : Yaesu System Fusion Radio Programming; POTA; SOTA; CW Learning & Operating**
- **Jerry Barnish, K2EAB : Radio Astronomy**
- **Mike Thompson, KG4JYA : Radio Astronomy; VARA (HF and FM); WinLink**
- **Steve Farney, W2SEF : WSJT-X; FT-8; LoTW; TQSL; Grid Square**
- **Carl Wittig, N2CRW : Audacity® Audio Editor**
- **Gary Mirkin, WA3SVW : FLDIGI; MMSSTV**
- **Jon Pearce, WB2MNF : Satellite Communications**
- **Frank Romeo, N3PUU : Toilet Installer; Jack-Of-All Trades - Master Of None**
- **John Hill, W2HUV : Local & Remote W2MMD HF Station Operation; Training & Support**
- **Dave Sheppard, W2PAX : National Traffic System**
- **Bob Pantazes, W2ARP : How To Manage QSL Cards Properly**

General Membership Meeting

Wednesday, May 07, 2025 @ 1900 Hours

Pfeiffer Community Center

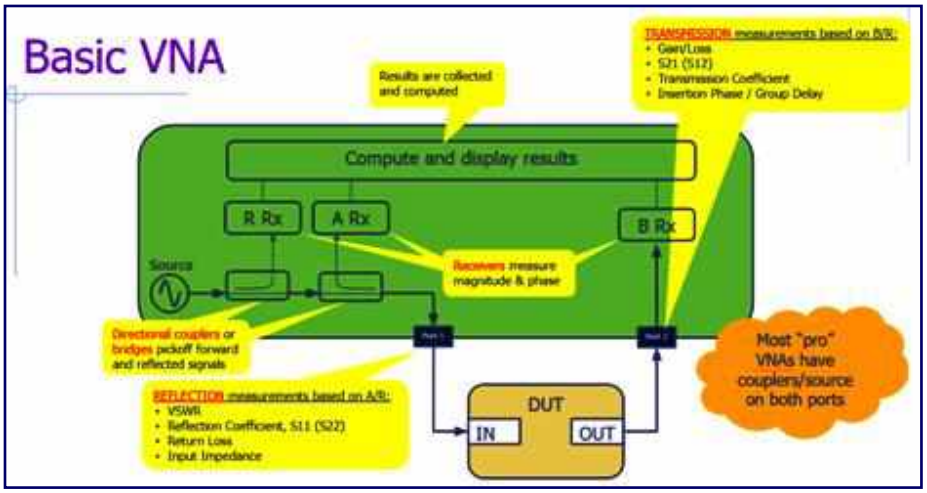
Simulcast Live Via ZOOM : Meeting ID : 914 7364 1808; Passcode : 843147
Join ZOOM Meeting Link : https://bit.ly/3Pt4dLO

Go to : www.w2mmd.org to download the ZOOM log-on instructions PDF

Introduction To VNA And NanoVNA

By Alan Wolke, W2AEW : https://www.youtube.com/@w2aew

This month's presentation by **Alan Wolke, W2AEW**, will begin with an in-depth exploration of vector network analyzers (VNAs), outlining their fundamental block diagram architecture and core functionalities. You will gain insight into the various applications of VNAs and understand why they are critical in modern measurement systems. The discussion will then introduce S-Parameters - detailing their significance in characterizing the reflective and transmissive properties of high-frequency networks.



Building upon this technical foundation, Alan will transition to a focused overview of the NanoVNA. A brief historical perspective will illustrate the evolution of the NanoVNA and the innovations that have fueled its development. Given the diverse range of NanoVNA variants currently available, the presentation will concentrate on the essential features common to most of the devices.

Continuing, Alan will delve into critical practical aspects such as the calibration process - explaining both the necessity for calibration and providing step-by-step guidance on how to perform it. Detailed coverage will also be given to typical use cases, including a guided tour through the device's menu system to facilitate efficient measurement setup and operation.

This comprehensive overview is designed to equip you with both the theoretical background and practical skills necessary to effectively utilize VNAs and NanoVNAs in advanced measurement and testing scenarios.

This should be a highly informative program. Don't miss it.

Tech Saturday Forum

First Session : May 10, 2025 @ 0900 Hours
Second Session : May 17, 2025 @ 0900 Hours

W2MMD Clubhouse

Forum Topic : Build The Wideband Dummy Load/Wattmeter Based On The February 2025 QST Magazine Article

Q & A Session About All Things Ham Radio and Socializing!

The HF Station Will Be Available For Local Operation!

Tech Saturday sessions are held at the W2MMD Clubhouse on the first Saturday of the month following the Wednesday Night General Membership Meeting and are designed to be hands-on collaborative events focused on using the Clubhouse resources to demonstrate various aspects of Amateur Radio and related technical areas. Previous sessions have covered USB software-defined radios, Raspberry Pi and Arduino devices, satellite operations and other similar topics.

We would like to invite all of our new members as well as our veteran members to our Tech Saturday Forums to help answer any questions and discuss any and all issues the new members have come across as they progress through the ***Amateur Radio Experience.***

The Discussion Theme is a QSO starting point - a way to initiate a conversation. All Tech Saturdays are an open QSO of all subjects of Amateur Radio interest. All questions are welcome as well as a venue for hams to show off their latest ham radio projects or gadgets. Have a problem programming that HT, we can help! Not sure what radio or antenna to buy, we can help!

All Club Members who would like Clubhouse access to use its radio equipment would have to have some brief "Elmering" on the Clubhouse rules, such as using the alarm system, the A/C and heaters, the antenna system, and the radio equipment. The Club's HF station is reserved for local use on Tech Saturday.

All are welcome - Hams and Non-Hams - Club Members and Non-Club Members.

Fox Hunt 33 : Spring Fox Hunt
Sunday, May 18, 2025
1300 - 1400 Hours

Spring Fun For The Whole Family!

Frank Romeo, N3PUU will be ***"The Fox"*** this time.

Everyone needs to checked in on the 147.180 repeater by 1300 Hours. There will be some brief instructions, then the Club's foxhunt transmitter will be switched on by Frank somewhere in Gloucester County.

Frank will send further instructions in an e-mail on the Club's reflector by Saturday, May 17, 2025.

The basic idea is that the closer you get to the transmitter, the stronger the signal. The first to find it has the privilege of hiding it for others to find next time. Those who find it will step away to allow others to keep hunting for it.

If anyone has not found it within an hour, we'll help talk them in to the finish, where we will pose for a post-hunt group photo, and share hunt stories together.

Sound fun? It really is! Hope to see you there!

Transmitter Frequency : 146.565 MHz Simplex (3rd Harmonic 439.695 MHz)

There is a new website for the Gloucester County Amateur Radio Club Volunteer Examiner Team. Everything you need to know about getting your ham license or upgrading your license can be found on this website. Pass It Around!

https://veteam.w2mmd.org

So you find our website confusing, can't find anything, Well So Do I!!

I have created a page *(What, Not Another Page!!)* called "Quick Links"

On this page you will find "Buttons" to some the most popular pages
I will add more as time goes on, but I hope this helps your journey navigating through your Club Website!
https://gloucestercountyarc.weebly.com/quick-links.html

Regional (Atlantic & Hudson Divisions) Hamfests & Events

May 03, 2025 : Old Barney Amateur Radio Club, Hamfest At The Shore, Surf City Firehouse, 713 Long Beach Boulevard, Surf City, NJ. **www.obarc.org**

May 03, 2025 : Antietam Radio Association, The Great Hagerstown Hamfest, Maugansville Bible Brethren Church, 17904 Binkley Avenue, Maugansville, MD. **www.antietamradio.org**

May 04, 2025 : Warminster Amateur Radio Club, Warminster ARC Annual Hamfest, ARRL Eastern Pennsylvania Section Convention, Bucks County Community College, Lower Bucks Campus, 1304 Veterans Highway (Route 413), Bristol, PA. **www.wp.k3pn.org**

May 04, 2025 : Orange County Amateur Radio Club Hamfest, Black Rock Fish & Game Club, 5 Pheasant Hill Road, Mountainville, NY. **www.ocarcny.org**

May 17, 2025 : Thousand Islands Repeater Club Hamfest, Depauville Fire Department Social Hall, 15191 School Street, Depauville, NY. **www.tirepeaterclub.com**

May 18, 2025 : Splitrock Amateur Radio Association Tailgate Hamfest, Landing Park Recreation Complex, 165 Landing Road, Landing, NJ. **www.splitrockara.org**

May 25, 2025 : Maryland FM Association Hamfest, Howard County Fairgrounds, 2210 Fairgrounds Road, West Friendship, MD. **www.marylandfm.org**

May 31, 2025 : Ocean Monmouth Amateur Radio Club, OMARC Spring Hamfest, Spring Lake Volunteer Fire Company Number One, 700 Sixth Avenue, Spring Lake, NJ. **www.n2mo.org**

GCARC TechNet ZOOM Forum

GCARC TechNet ZOOM Forum is scheduled to be available every Monday Night until December 29, 2025.

There will not necessarily be a topic scheduled every Monday Night, but the opportunity is available to schedule succeeding topics of interest on consecutive Monday Nights.

Every Monday @ 1930 Hours

Date &Forum Topic : See e-mail and website for more information

Go to : https://gloucestercountyarc.weebly.com/gcarc-technet.html
for TechNet Information Resources and ZOOM Instructions

Meeting ID : 933 9943 3123 ; Passcode : 800835
Join ZOOM Meeting Link : https://bit.ly/3K8bWwj

GCARC Monthly VE Exam Testing Summary - April 10, 2025

By Chris Prioli, AD2CS

The regular monthly VE session was held on Thursday, 10 April at the W2MMD Clubhouse. There was one single exam candidate, who was seeking an upgrade to Amateur Extra status. The session was attended by a total of six GCARC Volunteer Examiners. The Team Liaison for this session was **Chris Prioli ADCS**.

The candidate, who was successful in a big way, was **Richard B Federici KD2WDN**, who upgraded to an Amateur Extra license with a perfect score.

Richard was offered the opportunity to join GCARC, and he said that he would consider doing so.

The VE Team proctored an exam session using completely electronic methodologies. This means that the candidates completed the exams online, and that all grading and submissions were done online as well.

The GCARC VE Team that proctored the exam session included the following Volunteer Examiners :

- **Gary Reed N2QEE**
- **John O'Connell K2QA**
- **Rich Subers W2RHS**
- **Court Smith KD2SPJ**
- **Jim Wright N2GXJ**
- **Chris Prioli AD2CS**

The next regularly scheduled VE session will be held on Thursday, 8 May 2025, at 1900 Hours at the W2MMD Clubhouse. The VE team will be using the new ExamTools system to its fullest capability, within our current technological means.

It is important that all test candidates going forward will be advised, whenever possible, to pre-register and pre-pay for the exam online. Specifics of that process are explained at : **https://veteam.w2mmd.org**

W2MMD

www.facebook.com/W2MMD

twitter.com/w2mmd_gcarc

Facebook

"Dinner @ The W2MMD Clubhouse"
Wednesday, May 28, 2025 @ 1800 Hours
W2MMD Clubhouse

Gloucester County Amateur Radio Club
YouTube Channel
https://www.youtube.com/@W2MMD

Membership Badges Ready For Pick-up.

They can be picked up at the W2MMD Clubhouse or at the monthly General Membership Meetings

Dave Danichkin, KD2UXC Jack Snyder, AI2D
Jim Foster, W3JNF

New Members Support Group & Discord Channel

- **Organized By Jim Beury, KE2DRN**
- **Objective : To focus Club resources on the needs of newly licensed members**
- **Supported by "new_members" Discord Channel**

Additional Support :

- **Saturday Morning @ The W2MMD Clubhouse**
- **GCARC@MAILMAN.QTH.NET Club E-mail Reflector**
- **E-Mail President @ w2mmd.org**

Need a ride to a Club meeting, event, or activity?

Just send a message to the Club's e-mail reflector asking if a member can pick you up

GCARC <*at*> MAILMAN <*dot*> QTH <*dot*> NET

All Club members have access to this FREE e-mail service

NTS Resources

The National Traffic System® (NTS) is a network of Amateur Radio operators who move information during disasters and other emergencies. General messages offering well wishes also move through the NTS to help test the system and to help Amateur Radio operators build traffic handling skills. While the NTS is primarily set up to serve the United States and Canada, it is possible to move traffic internationally through the NTS through various local, regional, area, and international network connections.

- **NTS 2.0 : https://nts2.arrl.org**
- **NTS Manual : https://www.arrl.org/nts-manual**
- **NTS Methods and Practices Guidelines Table of Contents : https://www.arrl.org/table-of-contents-nts-methods-and-practices-guidelines**
- **Handling Instructions : https://nts2.arrl.org/hx-handling-instructions**
- **Numbered Texts : https://nts2.arrl.org/numbered-texts**
- **Form Encoding Rules for Form : https://nts2.arrl.org/form-encoding-rules-for-forms**

DAs and DITs

>> Look what's on page **96** of the **May 2025 QST** magazine! It is a review on our own **Ron Block, NR2B**'s new book **"Lightning Protection : A Comprehensive Guide for Amateur Radio"**! Reviewed by none other than **Ward Silver, N0AX**. Great Job, Ron! Ron's book can be purchased at **www.wrblock.com**.

Your Challenge : Contact A Military Radio Station On Saturday, May 10, 2025

By Jim Wright, N2GXJ

Know how to operate your HF radio "split", where you listen on one frequency and transmit on another? This is a good skill to have. Now, let us add to that challenge. Ever tried to operate your radio split to make contact with a military radio station that is transmitting outside of the ham bands while you transmit within the ham bands to talk to them? Well, on May 10th this year, there is a chance for you to try your luck at doing this during the AFD Crossband Test.

The AFD (Armed Forces Day) Crossband Test is an annual event, organized by the Army Military Auxiliary Radio System (MARS) and the Department of Defense (DoD), designed to facilitate two-way radio communication between military communicators and amateur radio stations. With details at **https://www.dodmars.org/mars-comex-information-website/armed-forces-day**, this is a unique opportunity for us as radio operators to demonstrate our skills in a controlled exercise, promoting interoperability between military and civilian radio services. Ready to take on the challenge?

Here's a tip from experience : do take a look at that link. At that link you'll find important details, like what the military callsigns to listen for (e.g. "WAR" from the Pentagon), along with what times and frequencies to listen for them on. Without this, it would be really hard to find them. Even with this information, it may take some patience, as some don't call that often and you need to hear what they are saying to know where in the ham bands they are listening, so that you can transmit there to talk to them.

If you do succeed in the challenge, you can request a QSL card to document your achievement from : **https://www.usarmymars.org/events**. An example QSL card from 2022's AFD cross-band test is shown below.

Good luck to all who take on this challenge, and congratulations in advance to you if you succeed!

The Education Connection

By Chris Prioli, AD2CS - chris@ad2cs.com
www.ad2cs.com

May 2025

Well, we are just (as I write this) three weeks from the **May 10, 2025 Tech Saturday Forum**, at which we will be building the Wattmeter/Dummy Load project that was described in the February issue of QST magazine. This project was laid out in an article by **Bob Fontana AK3Y**, and uses an Arduino as its "brain" - to do all of the heavy lifting. This build uses two separate custom PCB's and a 3-D printed enclosure, a flange-mounted high-power resistor for the load element, as well as several small components - all THT - and a 0.96" OLED display. All of the necessary parts and components will be provided. While most of the seats are now sold, we are not yet sold out, so if you are interested in participating, go to **https://registration.w2mmd.org/wpregp/gcarc-dummy-load-wattmeter-project-build** and complete the registration form found there. At this point, all seats for the 10 May session are sold out, but there are still some seats available for the 17 May session. The original QST article is on the next 3 pages.

We did some quite extensive planning and re-design work to improve upon the original design while at the same time making the build more friendly to the average or less-experienced kit builder. All parts and components, including a handsome labeled enclosure and custom printed circuit boards are provided in the build kit. The kit, as packaged, is broken down into the basic sections of the build - the detector board, the processor board, and the final assembly of and into the enclosure.

The huge benefit of this instrument is the fact that it will automatically and instantaneously indicate the power level of the signal being impressed upon the dummy load. While the kit can be built as either a 25-watt, a 50-watt, or a 100-watt device, my recommendation is to build all of them to the 100-watt design level. There is no advantage to building this unit for the lower power levels, and its accuracy is almost the same regardless which design level is selected. The greatest versatility is found by simply building it for the 100-watt power capability.

The kits are complete right down to the last screw and washer required for the build, and the parts are carefully packaged against accidental loss of any small parts. In addition, while I will be on hand for the build sessions, a thorough and complete assembly manual has been written, providing exact step-by-step instructions on the entire build process. The manual is generously illustrated with photos made during an actual build of the unit, and a completed instrument will be on hand on the dates of the build sessions.

It is rare that I devote an entire monthly column to a single topic as I have done this month, but I am very enthusiastic about this project. I expect that everyone who participates will have fun doing the build, and will get many years of productive use from the finished product.

As assembled, the instrument will have an accuracy level of better then 5% across the amateur radio spectrum up to and including 23 centimeters. With an optional calibration, that accuracy can be brought down closer to one percent. While there will not likely be time for calibration during the building of the unit, it can be brought back to the Clubhouse for calibration on almost any Saturday afterwards.

Oh yeah - plan on bringing (or at least breaking for) lunch, because it will be a longer-than-usual Tech Saturday, as most of our build session dates are.

That's it for now… See you next month!

A Wideband Dummy Load with a High-Accuracy Wattmeter

This inexpensive dummy load/Arduino-based wattmeter for 2 meters, 70 centimeters, and 23 centimeters is easy to build and performs like a commercial device.

The completed dummy load/wattmeter.

Bob Fontana, AK3Y

In their November 2018 *QST* article "Build an Inexpensive 150 W Dummy Load with Wattmeter," authors Jack Purdum, W8TEE, and Al Peter, AC8GY, designed and built an Arduino-based wattmeter with a dummy load that was limited to the HF through the lower VHF bands.

In "A High-Power Dummy Load for DC through VHF" in the August 2023 issue of *QST*, Stephen Werner, AG4W, used high-power flange-mounted resistors in a dummy load that could handle legal-limit power at up to 225 MHz.

My local FM repeater club recently decided to design a dummy load/wattmeter that covers 2 meters, 70 centimeters, and 23 centimeters. It had to accurately measure power levels from a few tens of milliwatts to 100 W, and it had to be compact enough to use for ARRL Field Day or other portable operations. Another desirable feature was the ability to use the same instrument in the VLF through HF spectrum, as several of us were also experimenting in the 630- and 2200-meter bands. A truly wideband device was of paramount interest. To achieve these requirements, it uses a flange-mounted high-frequency/high-power resistor with a diode detector and an Arduino microcontroller. The associated software uses a few techniques to achieve very high accuracy, even at very low power levels.

Flange-Mounted Resistors

Flange-mounted resistors typically use either a thin beryllium oxide (BeO) or thick aluminum nitride (AlN) film for the substrate material. Tantalum is often used as the resistive material. The mechanical and electrical properties are well controlled, resulting in superb high-frequency behavior — often well into the microwave range. Because of their thermal conductivity, these flange-mounted resistors can dissipate a lot of power despite being quite small. They are usually inexpensive, at less than $5 for a 250 W unit. But before acquiring one, understand that beryllium is highly toxic. Don't ever open one of these devices.

Design Concept

The dummy load/wattmeter consists of two printed circuit boards (PCBs): one for the wattmeter detection circuitry and another for the Arduino/display circuitry and interface. The detector board is flush mounted to a 45 × 60-millimeter aluminum heatsink, and the load

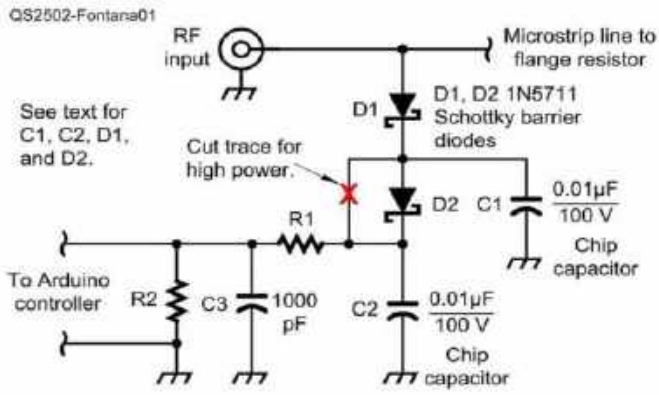


Figure 1 — The dummy load schematic.

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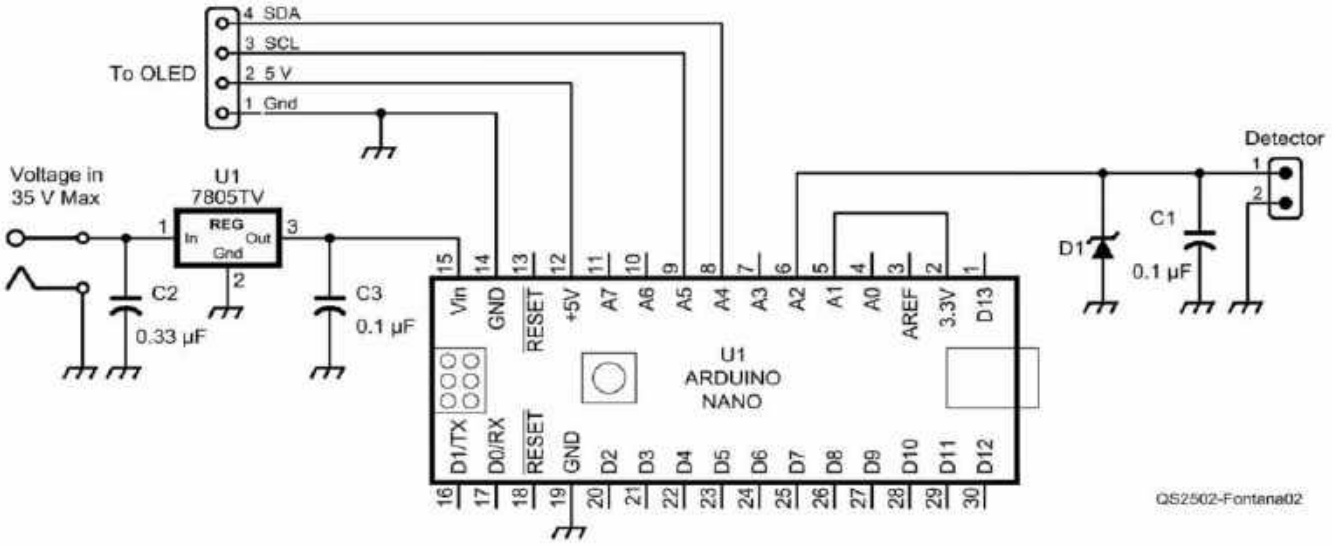

Figure 2 — The Arduino controller and display schematic.

resistor is also mounted on the heatsink. The PCB construction allows for the use of 50 Ω microstrip interconnects, which results in a wide frequency response. The Arduino-based wattmeter portion of the project incorporates automatic calibration of the resistor-divider network using the on-board 3.3 V reference voltage. The resistor-divider network limits the detector voltage into the Arduino's analog inputs. More detailed descriptions of the calibration techniques used and the associated software design can be found at **www.arrl.org/qst-in-depth**. There, you will also find the Gerber files for the detector circuitry and Arduino-based controller PCBs.

Circuit Details

The schematics for the two PCBs are shown in Figures 1 and 2. The assembled PCBs are shown in Figures 3 and 4. The complete parts list for the two boards and pictures of the bare PCBs are shown at **www.arrl.org/qst-in-depth**.

The flange-mounted power resistor mounts to the heatsink using thermal compound. A short length of 50 Ω microstrip connects it to the SMA input connector. Because the heatsink is small, operation at 100 W should probably be limited to no longer than 1 minute. For higher power levels, or for longer transmit durations, you can flip the unit so that the heatsink is on top. If you flip the unit, you must also flip the OLED display. This requires a couple of lines of code change. Add the line "display.setRotation(2);" after each instance of "display.clearDisplay();"

The completed assembly is shown in Figure 5, which demonstrates the power from a Baofeng UV-5R being

Figure 3 — The assembled dummy load/detector.

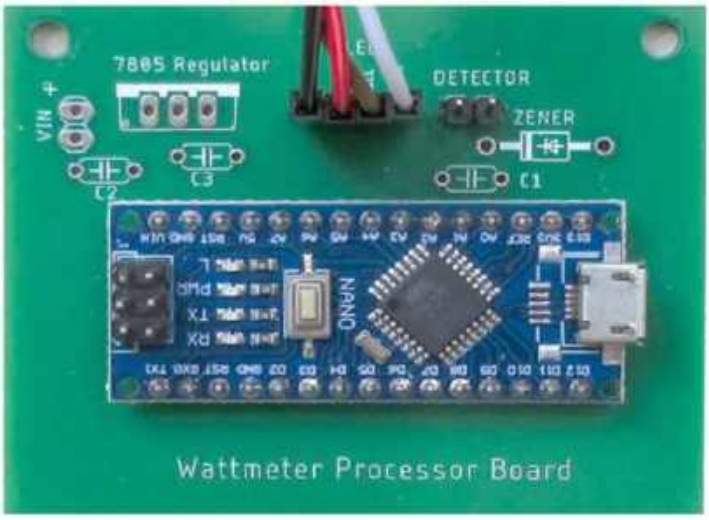

Figure 4 — The assembled Arduino controller.

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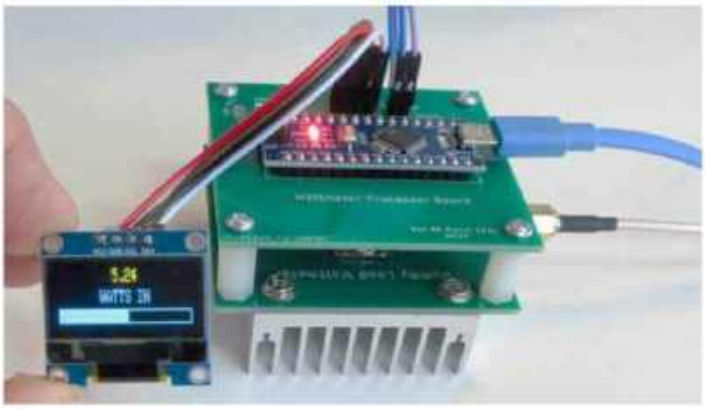


Figure 5 — The assembled and unpackaged dummy load/wattmeter.

measured at 146.52 MHz. The software provides an adaptive bar graph display so that changes in power level can be observed both numerically and graphically — the latter is useful for tuning applications. The lead photo shows the dummy load/wattmeter packaged in a 3D-printed case. The 3D STL files are included at **www.arrl/qst-in-depth**.

Performance and Recap

The measured standing wave ratio was less than 2.0:1 to 1360 MHz and less than 1.5:1 from dc to 755 MHz. Using my Icom IC-9700 as a signal source, I compared this unit to an Agilent 8482A power sensor and HP437B power display on 2 meters, 70 centimeters, and 23 centimeters. The results are shown in Figure 6.

You can see how close the two setups compare, down to the tens of milliwatts (the minimum readable signal level for this unit is approximately 5 mW). On 2 meters, the worst-case error was 1.6% (0.069 dB). On 70 centimeters, the worst-case error was 3.3% (0.14 dB), and on 23 centimeters, it was 9.9% (0.41 dB). However, keep in mind that the Agilent 8482A sensor element has specifications for only ±1.6%, and the HP437B power sensor can add another ±1.5% variation.

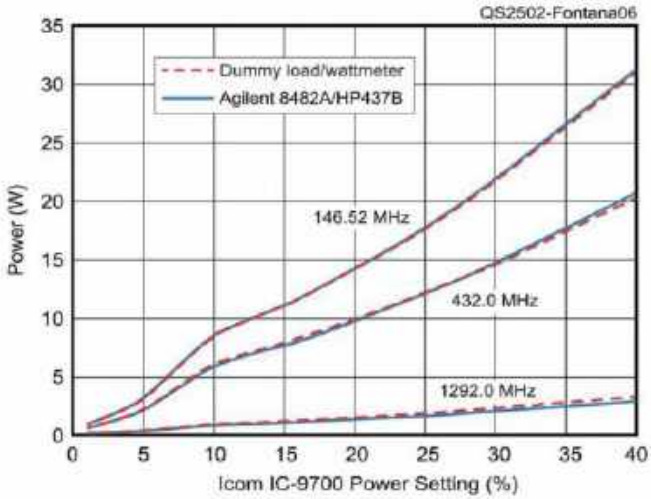
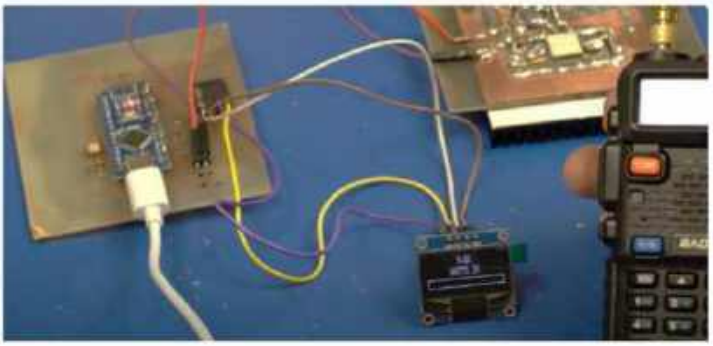


Figure 6 — A power measurement comparison between the dummy load/wattmeter described in this article and the commercial Agilent 8482A sensor.



Click here to watch ARRL Lab Digital RF Engineer John McAuliffe, W1DRF, take you along as he builds a wattmeter.

This article describes a field-portable dummy load/wattmeter that can be used from dc to the 23-centimeter band with an accuracy rivaling that of expensive Agilent test equipment. With the ability to measure power levels down to 10 mW, the unit is ideal for QRP and QRPP operations as well.

See *QST* in Depth for More!

Visit www.arrl.org/qst-in-depth for the following supplementary materials and updates:

- ✓ Calibration techniques for the resistor-divider network and associated software design
- ✓ Gerber files for the detector circuitry and Arduino-based controller PCBs
- ✓ Complete parts lists for the dummy load PCB and the wattmeter PCB
- ✓ Pictures of the bare PCBs
- ✓ STL files for the device's 3D-printed case

All photos provided by the author.

Dr. Robert J. "Bob" Fontana, AK3Y, was first licensed as a Novice in 1965. He holds a PhD in electrical engineering from Stanford University, and he is a Life Fellow of IEEE. Bob worked as an RF and systems engineer at Raytheon and Litton-Amecom. He was also part of the electrical engineering faculty at Carnegie Mellon University. Prior to his retirement, Bob was the president of Multispectral Solutions, Inc., a small business that specialized in the development of ultra-wideband technology for communications, radar, and tracking/positioning applications. Now retired, Bob enjoys working satellites using SSB, CW, FT4, and GMSK packet, as well as operating low power, CW, and digital modes on HF. Bob can be reached at **ak3y@arrl.net**.

For updates to this article, see the *QST* Feedback page at www.arrl.org/feedback.

VOTE
If you enjoyed this article, cast your vote at www.arrl.org/cover-plaque-poll

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Clubhouse Calendar Update

By Chris Prioli, AD2CS & Al Arrison, KB2AYU

Due to the fact that there has been some relatively minor confusion regarding the current status of the HF tower and antennas at the Clubhouse, we have made a modification to the Clubhouse Calendar, which is used to reserve user time on the radios in the HF room. The calendar now has a new yellow entry type that is used to indicate the current status of the HF antenna tower at any point in time. This will be a continuously ongoing *daily *entry in the calendar, and will have the current status described in the entry title.

Refer to the illustration below. This will be updated whenever the status changes, but the color will always be yellow, so it is important to look carefully when determining the tower status. Together with the height of the tower, we have determined some output power limitations, which are also shown on the calendar entries.

The basic guidelines are :

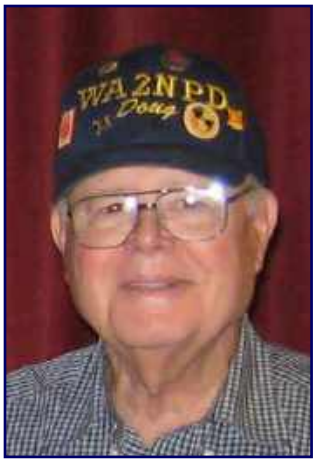
- **NO linear amplifier use is permitted when the tower is at reduced height**
- **Maximum transmitter output power to the antennas when the tower height is reduced will be :**
  - ◊ **100% of transmitter output (e.g., 100W of 100W maximum capability) on the 10-meter, 15-meter, 20-meter, and 40-meter bands**
  - ◊ **50% of transmitter output (e.g., 50W of 100W maximum capability) on all other bands, including the 12-meter, 17-meter, 30-meter, 60-meter, 80-meter, and 160-meter bands**

It is intended that this calendar entry will eliminate the questions or uncertainty about the tower and antenna availability. Please feel free to e-mail any questions to Chris Prioli, AD2CS or to Al Arrison, KB2AYU.

21
22
DOWN (Al KB2AYU) (856-244-6914)
HF Tower DOWN (Al KB2AYU) (856-244-6914)
9:00 Open Clubhouse (Everyone is welcome) (
9:00 kc3vtf (kc3vtf) (215-801-3149)
28
Mar 1
DOWN (Al KB2AYU) (856-244-6914)
HF Tower DOWN (Al KB2AYU) (856-244-6914)
9:00 Open Clubhouse (Everyone is welcome) (
9:00 Basic CHIRP Programming (Chris Prioli AD2

The Hardest QSO I Ever Made

By Vinnie Sallustio, N4NYY



On one day after Christmas 2009, the great and legendary **Doug Gehring WA2NPD (SK)**, invited me over for a day of mentoring and elmering in DXing. He explained everything, from QSLing, mailing, IRCs, security envelopes, LoTW, SFI, K and A, and then some. He also taught me about DXpeditions, rare and highly desirable countries. During this day, only interrupted when I bought him lunch, he told me some Doug Gehring stories. Anyone who remembers Doug, knows he was the greatest storyteller, probably in Club history. During those stories, he had mentioned countries like Micronesia, Pitcairn, Christmas Island, and a few others.

Fast forward to 2025. What became an addiction, I am now at 275 countries confirmed with 7BDXCC, all done with 100W and under, using wires and verticals. These days, the vast majority of DX is done digitally using FT8. There is still a CW following for DX, but SSB has pretty much been abandoned for DX, and has turned into a rag chew and net mode. I had pretty much contacted and QSL'd every "Doug Gehring" country from those stories with the exception of Micronesia. I had seen Micronesia spotted a few times over the last few years, but it was gone as quickly as it appeared. Much to my luck, the DXpedition calendar showed a **V6WG DXpedition** from March 18 - April 1. So, when the time came, I started looking for it.

I saw the spots early when he went QRV. After about 2 early decodes, I never saw him again. In FT8 language, that meant I could not see his signal. Since it was early in the DXpedition, I figured I would just follow it until the early pile would start to dissipate. Being a limited station, with low power, no beams, and antennas under 50 feet, I have to pick my spots when I am going to attempt a QSO with a busy DXpedition. As the days went by, I could see the pile from other hams QSOing him, but still could not decode or see him in the least. As March 28 came, and with 3 days left on the DXpedition, I started to get nervous. I really wanted to get this country, as it was likely the last "Doug Gehring" country. Complicating matters was that during the week, I had a short window after work to try a QSO, and then the window would disappear as the bands died. March 28 fell on a Friday, so I would have a bigger window to attempt the QSO, but this weekend would be the last shot. He would go QRT on Monday.

Friday afternoon, I still could not decode him. So, I decided to just try and email **Richard "Rikk" Lewis WE9G**, to explain the situation in a last gasp effort. Most DXpeditions may be in areas with limited internet access, or none at all. Forget cell phones. I thought that there was a good chance he may never see the email until long after he got home. Much to my surprise, he emailed me right back. Not only that, after reading my email, he sent me his cell phone to text and was adamant about wanting to make this QSO.

The Hardest QSO I Ever Made - Continued on page 19

The Hardest QSO I Ever Made - Continued from page 18

I got lucky. He had internet and cell phone service! What made this special was he was at a totally different time of day, halfway across the world.

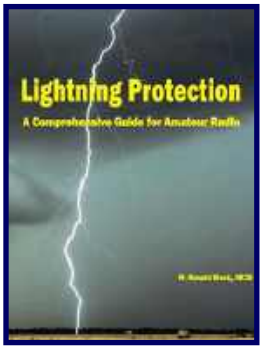
Rikk was a one-man show. If anyone has ever operated on Field Day, you operate for a couple hours straight and your mind can get fried until someone usually relieves you. The cycle then repeats. Not Rikk! He was the only op. He put up his antennas, set up his equipment, operated, and then shuts everything down, loads up and goes home, pretty much all by himself. He has also done this several times for prior DXpeditions. At this point, we started texting to try a QSO. He had literally altered his operation in an effort to make his signal stronger. He would rotate his dipole toward me, changed antennas, tried different programs. ***Nothing. No decode***. On my end, I was switching between my vertical and my OCF. Again nothing. His determination became stronger as we failed. We were texting and trying everything. Finally, at just after dinner time Friday, the bands to the US died. We texted and agreed to try again on Saturday.

Then Friday night at about 9pm, I was watching the spotter working some 30M FT8, when I started to see something weird. I started seeing DX spots for countries that had died out when the upper bands closed, about 3 hours before. I went on his live online log to see where Rikk was, and he was working 15M. and his log was showing US countries again. The upper bands freakishly reopened. I texted him and he saw the same thing. The US should have been gone, yet they were coming in again, with east coast stations no less. So, we went at it again, figuring this was a small window of opportunity. I am now receiving decodes from Japan, Australia, and other countries surrounding Rikk, but no decode from him. Again, he had altered his operating, in an effort to get the QSO. Rotating the dipole, switching antennas, etc. I was doing the same on my end. Again, no decode. At this point, we had no other options. My station was finally showing its limitations.

When we were just about quit 15M, we texted about trying 40M early in the morning before sunrise, when something hit me. When I first learned of FT8 from the mentoring of **Jim Wright N2GXJ**, he had told me to read and watch YouTube videos on hints and techniques of operating FT8. One such hint was switching from "Fast Decode", to "Deep Decode". It was a hint I saw one time and allows for receiving very low stations. But it has its drawbacks. You may get overwhelmed with stations that have no chance of hearing you. At this point, there was nothing else either one of us could do. So, I made the switch to "Deep Decode". Then, all of a sudden, I decoded him, for the first time in about 10 days! I quickly texted him that I decoded him and set up the rig to transmit. On my second attempt, he responded! I replied back and he completed the QSO! Not only that, but he also uploaded and confirmed the QSO on LoTW right then and there! It was done. I told him that was the hardest QSO I had ever made, and he was the best op I had ever DX'd since I started DXing in 2009. A few text messages later, we were joking and laughing about it. I proceeded send him a donation and we agreed to exchange QSL cards.

Many thanks to Rikk WE9G on getting me my last "Doug Gehring" country and giving me my hardest QSO ever!

Lightning Protection :
A Comprehensive Guide for Amateur Radio
Author : W. Ronald Block, NR2B
Contact : ron@wrblock.com
Website : www.wrblock.com



Kentucky Derby : 151st Running

By Jim Wright, N2GXJ

Having grown up in the Midwest, the Kentucky Derby has always been a fun event to look forward to on the calendar each year. Held each year on the first Saturday in May, this race is the oldest continuously running sports event in the United States. From fancy hats, to strange mint flavored bourbon drinks, watching this event together while yelling at the TV for our picked horses has become a can't miss family tradition for all ages with high stakes. You see, in our family, if anyone picked the winning horse, to them goes the winning $1, and bragging rights for the rest of the year. It's no wonder that to us, the "run for the roses" consistently lives up to its reputation as being the most exciting two minutes in sports. Especially when yelling at the TV together!

If you're not planning to be one of the estimated 150,000+ people in attendance to watch the race live in Kentucky this year (yes, it is that big of an event), you can watch it on TV with the rest of us at 6:45pm, Saturday, May 3, 2025 on either NBC, USA, NBCSports.com, Fubo, or Peacock.

With a strong triple-crown threat in the field this year (**Journalism**), along with some very strong contenders (including Sandman, Sovereignty, Tappan Street, and Rodriguez), this is shaping up to be an exciting race.

The New Jersey Knights of Columbus Amateur Radio Club (NJKCARC) will be sponsoring the 3rd Annual Special Event Station for the New Jersey Knights of Columbus 129th State Convention on Friday and/or Saturday, May 16-17, 2025, at the Wildwood Convention Center.

https://njkocarc.wixsite.com/new-jersey-knights-o

Reviewing The Baofeng DM-32UV Low-Cost DMR Radio

By Jon Pearce, WB2MNF

I recently tested the Baofeng DM-32 UV DMR radio within our DMR infrastructure, including our hotspots on 447.500 and the KB2LNB DMR repeater on 440.10625. This budget-friendly radio, available for around $48.91 on **AliExpress (https://www.aliexpress.us)** (excluding shipping) or at a discount from **Banggood (https://usa.banggood.com)** using the coupon code in the **Tech Minds YouTube video (https://www.youtube.com/watch?v=cnp597Xv8Yc)**, offers impressive features for its price. Its large, heavy build feels sturdy, and it stands out with USB-C charging and true AM reception on aircraft bands - features rarely found in other DMR radios. I ordered mine from Banggood, and it arrived in just a couple of weeks, making it a convenient option for Club members looking to expand their DMR capabilities without breaking the bank. The radio performed reliably with my hotspot and the KB2LNB repeater, delivering clear audio and stable connections, aligning well with our goal of creating a broad, accessible DMR communication network.

However, the DM-32 UV has some limitations that may affect its appeal for members accustomed to our Club's OpenGD77 firmware standard. Unlike many of our radios, it's not compatible with OpenGD77, requiring users to program their own code plugs using a distinct CPS interface, which could be a learning curve for those used to the consistent programming format of OpenGD77-compatible devices. This, combined with its bulkier design, might deter some users despite its low cost - about two-thirds the price of other DMR radios. Still, for members seeking an affordable entry into DMR with unique features like USB-C charging and AM aircraft band reception, the DM-32 UV is worth considering.

May 4 - 10, 2025 National Hurricane Preparedness Week : https://www.noaa.gov/hurricane-prep
Get Moving When a Storm Threatens
Protect your home: cover windows, secure doors & loose items
Determine sheltering options and consider your pets
Ready your go-bag, meds & supplies, charge phone, fill up/charge vehicle
Help your neighbors, especially the elderly & other vulnerable people
Follow evacuation orders if given

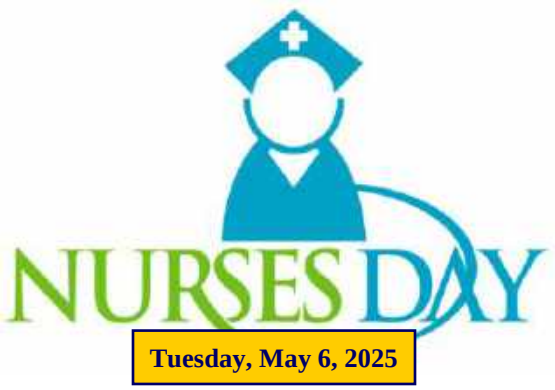
Amateur Radio Operators By State

By Jim Wright, N2GXJ

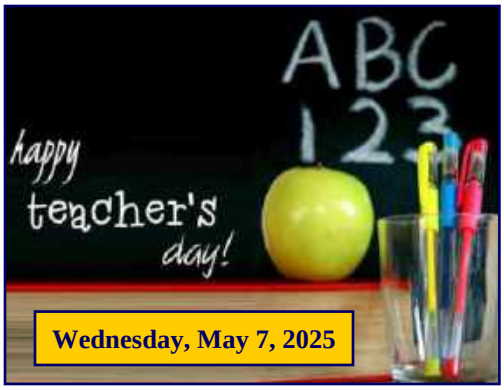
Want to venture a guess as to which states have the most licensed amateur radio operators in USA, which states have the least, and where our Delaware Valley states of New Jersey, Pennsylvania, and Delaware stand in the USA's rankings? Well, wonder no more!

According to data at **https://www.arrl.org/fcc-license-counts** retrieved on 18-April-2025, there are over 743,000 licensed amateur radio operators in USA, with just over **12,800 of them (1.7%) licensed in New Jersey**. This places New Jersey at 21 out of 50 states in a ranking of states based on number of licensed amateur radio operators. At the high end in the rankings are California (12.5%), Texas (7.2%), and Florida (5.7%), followed by Washington State (4.5%), Ohio (3.6%), New York (3.4%), **Pennsylvania (7th, at 3.2%)**, then North Carolina (3.1%), in that order. At the low end in the rankings are Wyoming, South Dakota, and Vermont, lastly followed at the bottom of the list by **Delaware (49th, at 0.2%)** then North Dakota.

With just 1,804 licensed operators (0.2% of USA's licensed operators), it is no wonder that our Club members who live in Delaware find themselves very popular on HF by those looking to Work All States!



Tuesday, May 6, 2025



Wednesday, May 7, 2025

GCARC VE Team : 2025 License Exam Monthly Summary						
	Technician Class		General Class		Amateur Extra Class	
	Monthly	YTD	Monthly	YTD	Monthly	YTD
January	0	0	0	0	0	0
February	2	2	0	0	1	1
March	1	3	2	2	0	1
April	0	3	0	2	1	2
May						
June						
July						
August						
September						
October						
November						
December						

7th Annual ARRL SNJ Section Convention

Presented By The

Gloucester County Amateur Radio Club

W2MMD

Celebrating Our 66th Year

www.w2mmd.org

Open To The Public At 8:00 AM : *Rain or Shine*

47th Annual Hamfest : Sunday, September 7, 2025

ADMISSION : $10.00	***Vendors and Tailgaters of new and used radio and electronic equipment***
Non-Ham Spouses and Kids FREE	

Monday & Thursday Night 40 Meter Net @ 1930 Hours
7.175 MHz (Minus 5 to 10 kHz)
NCS : Jim Clark, KA2OSV

ADIF Logs Wanted When Operating As W2MMD @ The Clubhouse

By Jim Wright, N2GXJ - Contact me via e-mail on Club Roster List

It is a common courtesy in ham radio to be able to QSL 2-way contacts made with other hams. We're pretty good about doing this for our field day contacts made each year, but are falling behind in this for contacts we make from the Clubhouse as W2MMD.

So here is the ask :

If you operate from the Clubhouse as W2MMD (e.g. on HF, UHF/VHF, or on Satellite, at Tech Saturday, or during contests or other), please email me the electronic log entries in ADIF format from the logger program you used for those contacts?

That way, just like I do following field day each year, I can get them uploaded to LOTW and to eQSL to offer the courtesy of an electronic QSL to those who make contact with us as W2MMD here in NJ.

Thank you

Tuesday AfterNoon Net @ 1200 Hours

Net Control Stations :
Steve Farney W2SEF; Rich Subers W2RHS;
Greg Ciraula K3GC; & Jeff Garth WB2ZBN

147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

Here is the schedule for the upcoming weeks

Greg Ciraula K3GC : May 6, 2025
Steve Farney W2SEF : May 13, 2025
Rich Subers W2RHS : May 20, 2025
Jeff Garth WB2ZBN : May 27, 2025

Greg Ciraula K3GC : June 3, 2025
Steve Farney W2SEF : June 10, 2025
Rich Subers W2RHS : June 17, 2025
Jeff Garth WB2ZBN : June 24, 2025

Greg Ciraula K3GC : July 1, 2025
Steve Farney W2SEF : July 8, 2025
Rich Subers W2RHS : July 15, 2025
Jeff Garth WB2ZBN : July 22, 2025
Steve Farney W2SEF : July 29, 2025

Greg Ciraula K3GC : August 5, 2025
Steve Farney W2SEF : August 12, 2025
Rich Subers W2RHS : August 19, 2025
Jeff Garth WB2ZBN : August 26, 2025

Greg Ciraula K3GC : September 2, 2025
Steve Farney W2SEF : September 9, 2025
Rich Subers W2RHS : September 16, 2025

Jeff Garth WB2ZBN : September 23, 2025
Steve Farney W2SEF : September 30, 2025

If you would like to be a Net Control Station for this net, please contact Steve Farney W2SEF

Thursday Night Rag Chew Net @ 2000 Hours

Net Control Stations :
Mary Delemarre W2TDS; Gary Mirkin WA3SVW;
Steve Farney W2SEF; & Jeff Garth WB2ZBN

147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

Here is the schedule for the upcoming weeks :

Jeff Garth WB2ZBN : May 1, 2025
Mary Delemarre W2TDS : May 8, 2025
Gary Mirkin WA3SVW : May 15, 2025
Steve Farney W2SEF : May 22, 2025
Jeff Garth WB2ZBN : May 29, 2025

Steve Farney W2SEF : June 5, 2025
Mary Delemarre W2TDS : June 12, 2025
Gary Mirkin WA3SVW : June 19, 2025
Steve Farney W2SEF : June 26, 2025

Jeff Garth WB2ZBN : July 3, 2025
Mary Delemarre W2TDS : July 10, 2025
Gary Mirkin WA3SVW : July 17, 2025
Steve Farney W2SEF : July 24, 2025
Jeff Garth WB2ZBN : July 31, 2025

Steve Farney W2SEF : August 7, 2025
Mary Delemarre W2TDS : August 14, 2025
Gary Mirkin WA3SVW : August 21, 2025
Steve Farney W2SEF : August 28, 2025

If you would like to be a Net Control Station for this net, please contact Jeff Garth WB2ZBN

Gloucester County Skywarn Net

The Gloucester County Skywarn Net is held every Sunday @ 1930 Hours on the 147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

All Are Welcome To Participate

Net Control Stations : Charlie Wahl KC2STO & Jeff Garth WB2ZBN

Gloucester County ARES Net

The Gloucester County ARES Net is held every Sunday @ 2000 Hours on the 147.180 MHz (+) (131.8) Repeater & EchoLink W2MMD-R

All are welcome to participate

Net Control Stations :

Steve Farney W2SEF; Bob Keogh KD2NEC; Karl Frank W2KBF; Al Arrison KB2AYU; Gary Mirkin WA3SVW; Greg Ciraula K3GC; & Todd Woodward KD2ESH

Steve Farney W2SEF : May 4, 2025
Karl Frank W2KBF : May 11, 2025
Al Arrison KB2AYU : May 18, 2025
Gary Mirkin WA3SVW : May 25, 2025

Steve Farney W2SEF : June 1, 2025
Todd Woodward KD2ESH : June 8, 2025
Steve Farney W2SEF : June 15, 2025
Greg Ciraula K3GC : June 22, 2025
Bob Keogh KD2NEC : June 29, 2025

Steve Farney W2SEF : July 6, 2025
Karl Frank W2KBF : July 13, 2025
Al Arrison KB2AYU : July 20, 2025
Gary Mirkin WA3SVW : July 27, 2025

Steve Farney W2SEF : August 3, 2025
Todd Woodward KD2ESH : August 10, 2025
Steve Farney W2SEF : August 17, 2025
Greg Ciraula K3GC : August 24, 2025
Bob Keogh KD2NEC : August 31, 2025

Anyone who is interested in joining the Gloucester County ARES Team, is invited to contact Bob Keogh at KD2NEC @ QSL.NET

ARRL Learning Center

https://learn.arrl.org

Discover how to make Amateur Radio your own.

Online courses from the ARRL Learning Center provide ARRL members with additional instruction and training for getting on the air, emergency communications, and electronics and technology

Current Website Updates : Go to this page to find out the latest changes & updates on our W2MMD Website

https://gloucestercountyarc.weebly.com/current-website-updates.html

At The Repair Bench…

A monthly column describing a recent repair bench event.

By Chris Prioli, AD2CS - chris@ad2cs.com - www.ad2cs.com

Heathkit® IT-3121 Semiconductor Curve Tracer Redux - May 2025

Figure 1 : Heathkit® IT-3121 Curve Tracer

Back in February of this year, I reported on a **Heathkit® IT-3121 Semiconductor Curve Tracer (Figure 1)** that had come in for repair. That turned out to be a simple matter of shorted electrolytic capacitors in the low-voltage power supplies. I repaired it and shipped it back to its owner, and collected my fee.

Here we are, three months later, and ***another IT-3121*** has landed on my bench for repair, from a different owner, but one who was referred to me by the owner of the first IT-3121 that I reported on back in February. This unit had a different apparent condition. It was blowing fuses as soon as it was powered on, without even a flicker of the panel-mounted neon pilot lamp. Tracking down a problem like this can be extremely difficult, as there are no working voltages to be measured, and all diagnosis must therefore be done without reference to voltages. Instead, we tend to look towards resistances in these situations.

So… how and where to start? The ***Heathkit® IT-3121 Assembly and Operation Manual*** provides a starting point in that the manual offers some "Initial Checks" which are to be performed by the individual assembling this instrument, prior to the first power-up of the unit. These checks are located in the ***Tests and Adjustments*** section of the manual, and they call for resistance measurements at specific points in the power supplies, measuring from those points to chassis ground in the form of the black banana jack on the instrument's rear panel.

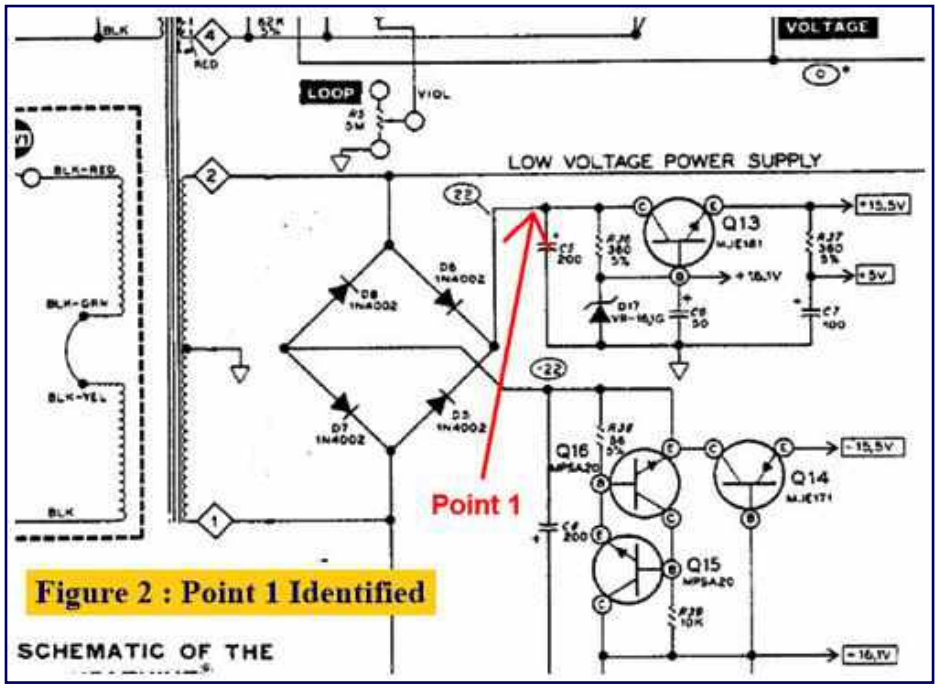


Figure 2 : Point 1 Identified

The first measurement is from a point identified as ***"Point 1"***, which is in essence the input to the positive-going low-voltage supplies, at the DC side of the full-wave bridge rectifier formed by diodes D5 through D8 **(Figure 2)**, which is common to the positive side of a 200µF/50V electrolytic filter capacitor C5. The specified resistance is to be at least 10kΩ from that point to chassis ground, with the positive probe of the ohmmeter at Point 1. The reading taken was 15.6kΩ, meeting the provided specification.

At The Repair Bench - Continued on page 27

At The Repair Bench - Continued from page 26

Next is the measurement taken at ***"Point 3"***, which is at the DC side of the full-wave bridge rectifier comprised of diodes D1, D2, D15, and D16 **(Figure 3)**. The resistance between Point 3 and chassis ground, measured with the positive probe of the ohmmeter on Point 3, is to be at least 100kΩ. It measured 221.5kΩ, again within specified limits.

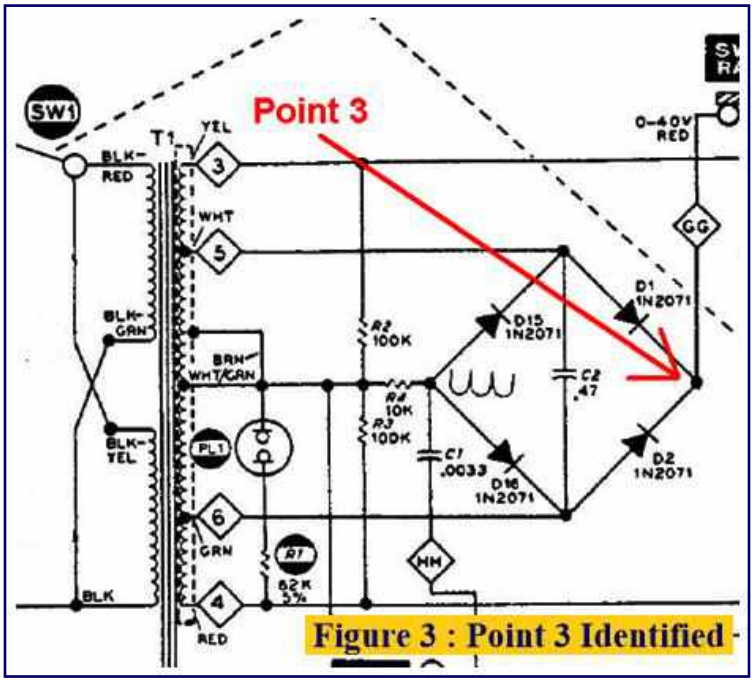


Figure 3 : Point 3 Identified

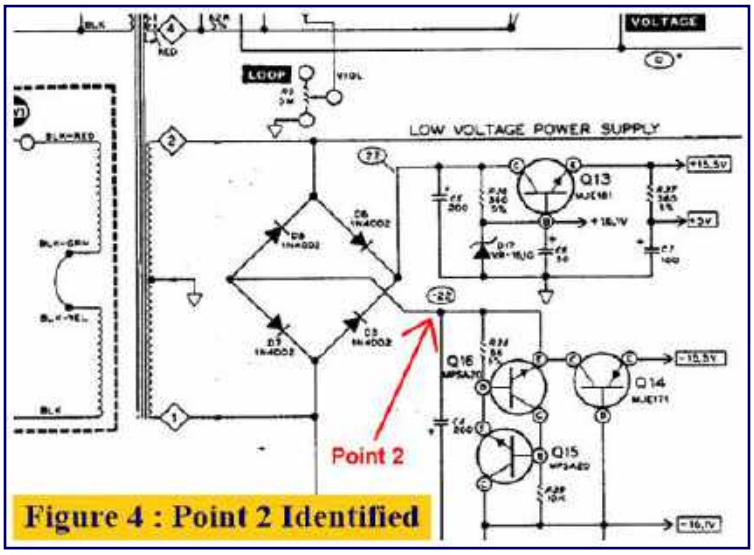


Figure 4 : Point 2 Identified

The third resistance measurement was to be taken with the probes reversed, placing the positive probe on chassis ground and the negative probe on ***"Point 2"***. This point is located at the negative output of the low-voltage supply's full-wave bridge rectifier (the same rectifier used when measuring ***Point 1*** above). This point is then effectively at the negative end of the 200µF/50V electrolytic capacitor C8 **(Figure 4)**, and it too called for a minimum of 10kΩ between that point and chassis ground. The actual reading was 17.3kΩ, making this one compliant as well.

These tests are designed to locate any direct short circuits present in the power supplies of the IT-3121, and all of the tests showed proper and normal conditions to exist. So… what's next? I decided to isolate the power transformer, to verify that the problem was not a shorted primary in the transformer. To do this, I desoldered and removed all of the transformer secondary leads from the printed circuit board (PCB). Upon power-up, the unit showed life in that the pilot lamp would now illuminate and the fuse would not blow. This meant that the transformer primary winding was not shorted and therefore not the cause of the problem.

In order to narrow down the location of the problem to a specific area of the unit, I decided to re-connect the transformer secondaries one circuit at a time. I first connected the low-voltage power supply input leads, a pair of blue wires and a blue with white tracer. The two blue leads were the two ends of that secondary winding, while the blue/white wire was the winding center tap, going to chassis ground. When powered up now, the low-voltage power supplies were all operational and the unit remained on. No problem there.

This caused me to take a good look at the sweep circuits and their associated transformer secondary leads. Starting out, I wanted to eliminate the supply to the sweep circuit FWBR, which were the green, the white, and the green with white tracer wires **(Figure 4)**. I reconnected those three wires and powered the unit up. Once again, the unit held, with outwardly normal indications. That left, by process of elimination, the remaining wire pair, the red and yellow wires, which are connected to the two extreme ends of the sweep supply secondary winding.

At The Repair Bench - Continued on page 28

At The Repair Bench - Continued from page 27

Knowing that the problem had to be in the circuit fed by those wires, I left them disconnected and went to work with the ohmmeter. The red and green wires supply incoming AC current to a half-wave rectifier comprised of diodes D3 and D4. According to the schematic, a 0.22µF capacitor C3 **(Figure 5)** is placed in shunt across this rectifier assembly as a filter device. A look at the PCB in the unit showed that somebody had been in here working on the board. This was very obvious because the 0.22µF capacitor was not there, but instead there was a pair of 0.1µF/100V metallized polyester film capacitors placed together in parallel. With the secondary leads disconnected, I should have been able to measure the capacitance of that parallel pair, and it should have showed an initially low resistance, immediately climbing high to an open circuit condition. What actually happened, however, is that the capacitance meter errored out, and the ohmmeter showed a direct short circuit when placed across the capacitor pair. I removed the two capacitors and separated them for individual testing, and found what I expected to find at that point. One of the two capacitors tested out normally, while the other one was shorted. A new 0.22µF Mylar™ capacitor, rated at 630 volts, solved the problem. With the new capacitor in place and the secondary leads reconnected, the unit powered up and ***almost*** worked properly.

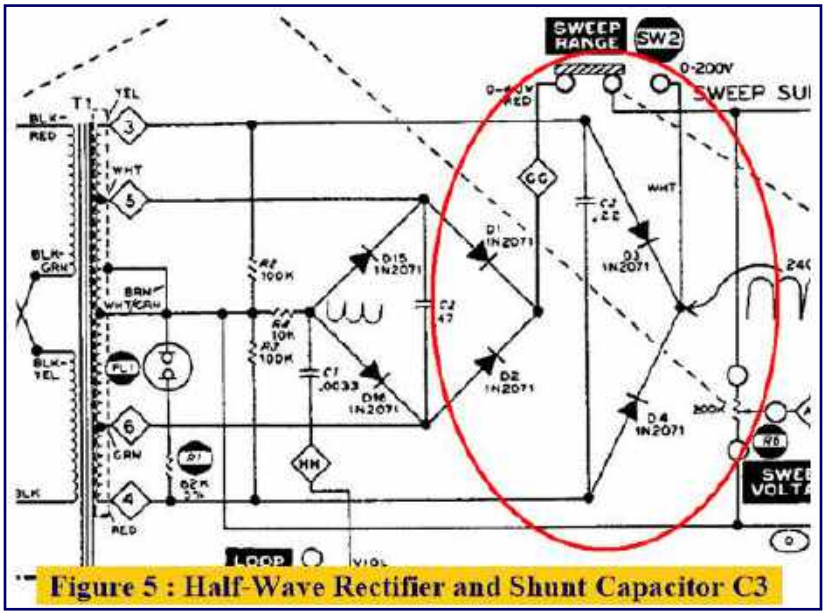


Figure 5 : Half-Wave Rectifier and Shunt Capacitor C3

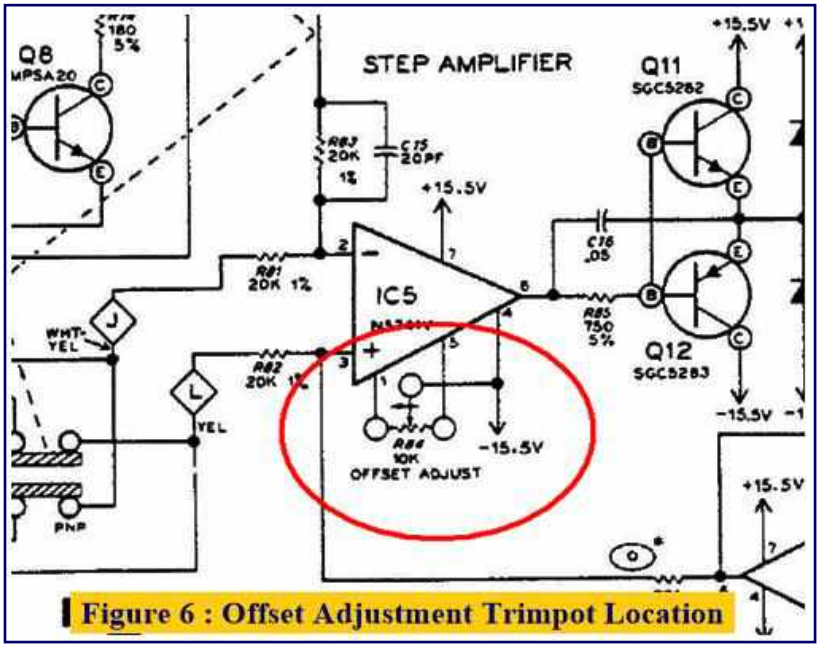


Figure 6 : Offset Adjustment Trimpot Location

It turned out that someone, possibly the same person, had also replaced an ***"Offset"*** trimmer potentiometer **(Figure 6)** that is mounted to the foil side of the PCB. The original trimpot there was a four-legged horizontal-mount 0.688" single-turn 10kΩ pot, but that had been replaced by an enclosed trim pot with a 0.375" square body and short wire leads. These leads had been extended, and only one of them was actually still connected. Two of the three leads had broken free of their apparent cold-solder joinery. This trimpot is used as a null-offset balance control for balancing the input voltages on a 741 operational amplifier IC. Without this control in place and properly adjusted, the output from the curve tracer is unpredictable at best. I happened to have a Bourns 3352U-1-103 trimpot in stock, which just so happens to be the same size, value, and type as the factory part for this application. Needless to say, that component went in as a replacement for the improperly-installed trimpot that was there. This restored proper operation of the op-amp circuit and thus the curve tracer in general.

Because of the early 1980's date codes on the electrolytic capacitors in this unit, I decided to replace them as a precautionary measure while I had it on the bench. This involved the replacement of nine capacitors, five of the radial type, and four axial devices. They were all in-stock parts as well.

At The Repair Bench - Continued on page 29

At The Repair Bench - Continued from page 28

Total time on the bench for this repair was about an hour. It seemed as if it might be a dog of a repair at first look, but in reality, it turned out to be a simple and straight-forward diagnosis and repair. Once again, it was a simple matter of thinking through the problem, studying the schematic, and understanding the circuits involved. In this manner, only those parts that have actually failed - or can be expected to fail in the near future - are replaced as a part of the repair.

See you next month!

Field Day - June 28 - 29, 2025

Band, Operators, & Operating Modes Chart

Band	Operator (Contact)	Mode
160 Meters		All Modes
80 Meters		Phone
80 Meters	Darrell Neron, AB2E	CW
80 Meters	Darrell Neron, AB2E	Digital
40 Meters	Bill Price, NJ2S	Phone
40 Meters	Sheldon Parker, K2MEN	CW
40 Meters	Melissa Guenther, KE2BWZ	Digital
20 Meters	Chris Prioli, AD2CS	Phone
20 Meters	Tony Starr, K3TS	CW
20 Meters	Eric Morris N2BRJ	Digital
15 Meters	Greg Ciraula, K3GC	Phone
15 Meters	Darrell Neron, AB2E	CW
15 Meters	Darrell Neron, AB2E	Digital
10 Meters	Jim Wright, N2GXJ	Phone
10 Meters		CW
10 Meters	Jim Wright, N2GXJ	Digital
6 Meters		All Modes
2 Meters	Herb Dyer, KT2Y	All Modes
70 Centimeters	Herb Dyer, KT2Y	All Modes
GOTA (Get On The Air) Station	Karl Frank, W2KBF	All Modes
Satellite	John O'Connell, K2QA	All Modes

Field Day - June 28 - 29, 2025

Support Staff and Bonus Points Information

Section	Support Staff / Bonus Points	Primary Contact	Points Available
	Culinary Support Staff	Jeff Garth, WB2ZBN (Etc.)	*Priceless !!!*
7.2	Power Multiplier	Jim Wright, N2GXJ	x2 (for Class A if all <100 Watts)
7.3.1	100% Emergency Power	Jim Wright, N2GXJ	100 Points/TX, Max 2000 Points
7.3.2	Media Publicity	Mike Resnick, N2WOQ	100 Points (Submit Evidence)
7.3.3	Public Location	Jim Wright, N2GXJ	100 Points
7.3.4	Public Information Table/Booth	Mike Resnick, N2WOQ	100 Points (Submit Evidence)
7.3.5	Formal Message To ARRL SM/SEC	Karl Frank, W2KBF	100 Points (Submit Evidence)
7.3.6	NTS/ICS-213 Messages Handled (# Msgs)	Karl Frank, W2KBF	10 Points/Each, Max 100 Points (Submit Evidence)
7.3.7	Satellite QSO	John O'Connell, K2QA	100 Points/1, Max 100 - In Log Band SAT
7.3.8	Alternate Power QSOs (Min 5)	Herb Dyer, KT2Y	100 Points (Separate Log, Submit Evidence)
7.3.9	W1AW Bulletin	Bruce Canino, KD2LBU	100 Points (Submit Copy As Evidence)
7.3.10	Educational Activity Bonus	Chris Prioli, AD2CS	100 Points
7.3.11	Site Visit By Elected Governmental Official	Mike Resnick, N2WOQ	100 Points
7.3.12	Site Visit By Representative Of ARES Served Agency	Mike Resnick, N2WOQ	100 Points
7.3.13.1	GOTA Bonus (Names, Modes, #QSO Each)	Karl Frank, W2KBF	5 Points/Each QSO, No Limit (Submit Evidence)
7.3.13.2	GOTA Coach Bonus Claimed	Karl Frank, W2KBF	100 Points (Submit Evidence Min 10 QSO)
7.3.14	Web Submission	Melissa Guenther, KE2BWZ	50 Points
7.3.15	Youth Element Bonus (18 or Under, #QSO	Radio Chairs (Records Required)	20 Points/Each, Max 100 Points
7.3.16	Social Media Bonus (FB, Twitter, Etc.)	Jeff Garth, WB2ZBN	100 Points
7.3.17	Safety Officer Bonus (Class A Only)	Herb Dyer, KT2L Ron Block, NR2B	100 Points (Submit Evidence)
7.3.18	Site Responsibilities (Class B, C, D, E, F Only)	N/A For W2MMD	50 Points

Field Day - June 28 - 29, 2025

Food / Supply / Help Donations

Donation	Name
(36) Hot Dogs	Glen Guenther, KE2BUO & Melissa Guenther, KE2BWZ
(36) Hamburgers	Mike Resnick, N2WOQ
Rolls - Hot Dogs & Hamburgers	Mike Resnick, N2WOQ
Meatballs	Kathy Romeo
Verchio's Hoagies - (14) Ordered June 14, 2025 Kathy will pick up Saturday 28th AM	Frank Romeo, N3PUU Kathy Romeo
Potato Salad	
Pasta Salad	Earl Moore, KC2NCH
Macaroni Salad	
Green Salad	
(6) Dozen Eggs	Angela Metzger, KE2DRJ
Deviled Eggs	Beth Barnish, KB2EAL
Baked Beans	Beth Barnish, KB2EAL
Sausage & Peppers	Beth Barnish, KB2EAL
Water Bottles	Glen Guenther, KE2BUO & Melissa Guenther, KE2BWZ
(50) Breakfast Sausages	
(30) Hash Brown Potatoes	
Lettuce, Tomatoes, Onion (Sliced)	Jeff Garth, WB2ZBN
3 lbs American Cheese	Marylu Ciraula, K3MLC
Potato Chips	Marylu Ciraula, K3MLC
Pretzels	Marylu Ciraula, K3MLC
Ice (Needed for both days)	Beth Barnish, KB2EAL
Baked Mac & Cheese	
BBQ Operator	
Desserts	Karen Garth Marie Farney
Kitchen Helpers	Beth Barnish, KB2EAL Kathy Romeo Jonathan Romeo

Amateur Radio Emergency Services - May 2025
Resources - News - Updates

By Bob Keogh, KD2NEC - kd2nec@qsl.net
Gloucester County Emergency Coordinator

Picture yourself, anxiously watching the Weather Channel, because you heard that there was a severe hurricane heading your way. All of a sudden, you lost electrical power, the internet and cellular phone service. You are now in the dark and you can't get any information on the direction and severity of the storm.

Hopefully you have purchased a generator, a deep cycle battery, an amateur radio with a good antenna and you have been maintaining the whole system.

What frequency should you go to for your local weather? That's right, 147.180 MHz, our primary 2 meter repeater. You will hear many of our GCARC members giving weather reports from the station in their backyard. They will give you information on wind speed, amount of rain, if the barometric pressure is increasing or decreasing and most importantly, damage assessment.

If several operators west of you are saying that the storm has moved out but others are saying that it's just starting to rain, you can determine the general direction on the storm.

If you would like to learn more about the "SkyWarn" program, tune your radio to 147.180 MHz, +0.6 MHz, PL 131.8 Hz, on Sunday Evenings at 7:30 PM. You can also go to : https://www.weather.gov/phi/skywarn

ARES Resources (Updated as of November 2024)

ARRL ARES Registration Form : https://bit.ly/3Ae2pCf
Download the ARES Manual [PDF] : https://bit.ly/3iUhJLQ
ARES Field Resources Manual [PDF] : https://bit.ly/3QT4PtY
ARES Standardized Training Plan Task Book July 2024 Ver. 3.0 [Fillable PDF] : https://bit.ly/4dToEes
ARES Standardized Training Plan Task Book July 2024 [Word] : https://bit.ly/4heLXSU
ARRL ARES Plan July 2024 : https://bit.ly/3Uf8gyf
ARES Group Registration : http://bit.ly/3XodGpX
ARRL Emergency Communications Training : http://bit.ly/3J2gMMf
FEMA 2023 National Preparedness Report : https://bit.ly/3YrPWnY
Southern New Jersey Section Emergency Operations Plan 2023.PDF : https://bit.ly/3YqMdHb
ARRL ARES Monthly Newsletters : https://bit.ly/408OV5d

The Amateur Radio Emergency Service® (ARES) consists of licensed amateurs who have voluntarily registered their qualifications and equipment, with their local ARES leadership, for communications duty in the public service when disaster strikes. Every licensed amateur, regardless of membership in ARRL or any other local or national organization is eligible to apply for membership in ARES. Training may be required or desired to participate fully in ARES. Please inquire at the local level for specific information. Because ARES is an amateur radio program, only licensed radio amateurs are eligible for membership. The possession of emergency-powered equipment is desirable but is not a requirement for membership.

If you are interested in learning more about the Gloucester County ARES Program or becoming an ARES member, please contact Bob Keogh (KD2NEC@QSL.NET)

Club Member	DMR ID
W2MMD Clubhouse	**3198604**
Michael Andrescavage, N2ICV	3134044
Lance Appel, KE2UC	3200487
Alex Calabrese, WA2ADS	3100583
Chuck Capasso, WB2PGE	3169781
Matthew Carango, N3QB	3169432
Todd Cecilio, KA2YNT	3169458
Anthony Cerami, N2OAC	3202759
Mark Clark, N3QMJ	3102110
Norm Coltri, K2NRC	3183851
Holden Correia-Fisher, KD2JPV	3104911
Mike Covaleski, N2MMC	3134855
Walter Coward, WX2E	3166863
Bob Demola, KD2GFL	3134319
Doug Dersch, KD2VQA	3193630
Thomas Distelcamp Sr, KC2GYC	3110869
Glenn Dougherty, N2YIO	3161836
Adam Duncan, W3DUN	3202691
Herb Dyer, KT2Y	3134907
Harry Elwell, AD5TT	3128498
Misael Fernandez Jr, KE2EBL	3214756
James Foster, W3JNF	3142117
Karl Frank, W2KBF	3146716
Glen Guenther, KE2BUO	3202079
Melissa Guenther, KE2BWZ	3202496
Deirdre Anne Hebert, AD2GQ (AB1ST)	3133330
Gary Hewitt, N2WHV	3134654
Chuck Lanard, KD2EIB	3134298

Club Member	DMR ID
Gary Mirkin, WA3SVW	3165494
John Murrow, KD2NHK	1134122
John Newman, WB4YLM	3213273
Phil Nunzio, WA3RGY	3134336
John O'Connell, K2QA	3110610
Robert Pantazes, W2ARP	3157208
Sheldon Parker, K2MEN	3214037
Jonathan Pearce, WB2MNF	3163415
Michael Pecorini, K2MRP	3132996
Michael Pentimall, KC3VTF	3203601
John Price III, KD2QYC	3123583
Chris Prioli, AD2CS	3195449
Michael Resnick, N2WOQ	3215856
Frank Romeo, N3PUU	3134935
Len Rust III, W2LJR	3186225
Len Rust IV, K2LJR	3196243
Dave Sheppard, W2PAX	3112666
Cory Sickles, WA3UVV	1142052
James Simeone, KC2AOF	3134848
Stan Slachetka, WA2JRZ	3213904
Court Smith, KD2SPJ	3186243
Jackson Snyder, AI2D	3164371
Rich Subers, W2RHS	3204316
Brett Waller, K2BKW (KC2UXQ)	3134261
Bill Wood, KD2OSJ	3197459
Jim Wright, N2GXJ	3215168
John Zaruba Jr, K2ZA	3134331
New Entries As Of 04/11/2025	

For more information, DMR links, and W2LJR's DMR presentations, go to :
https://gloucestercountyarc.weebly.com/dmr.html

Monday, May 26, 2025

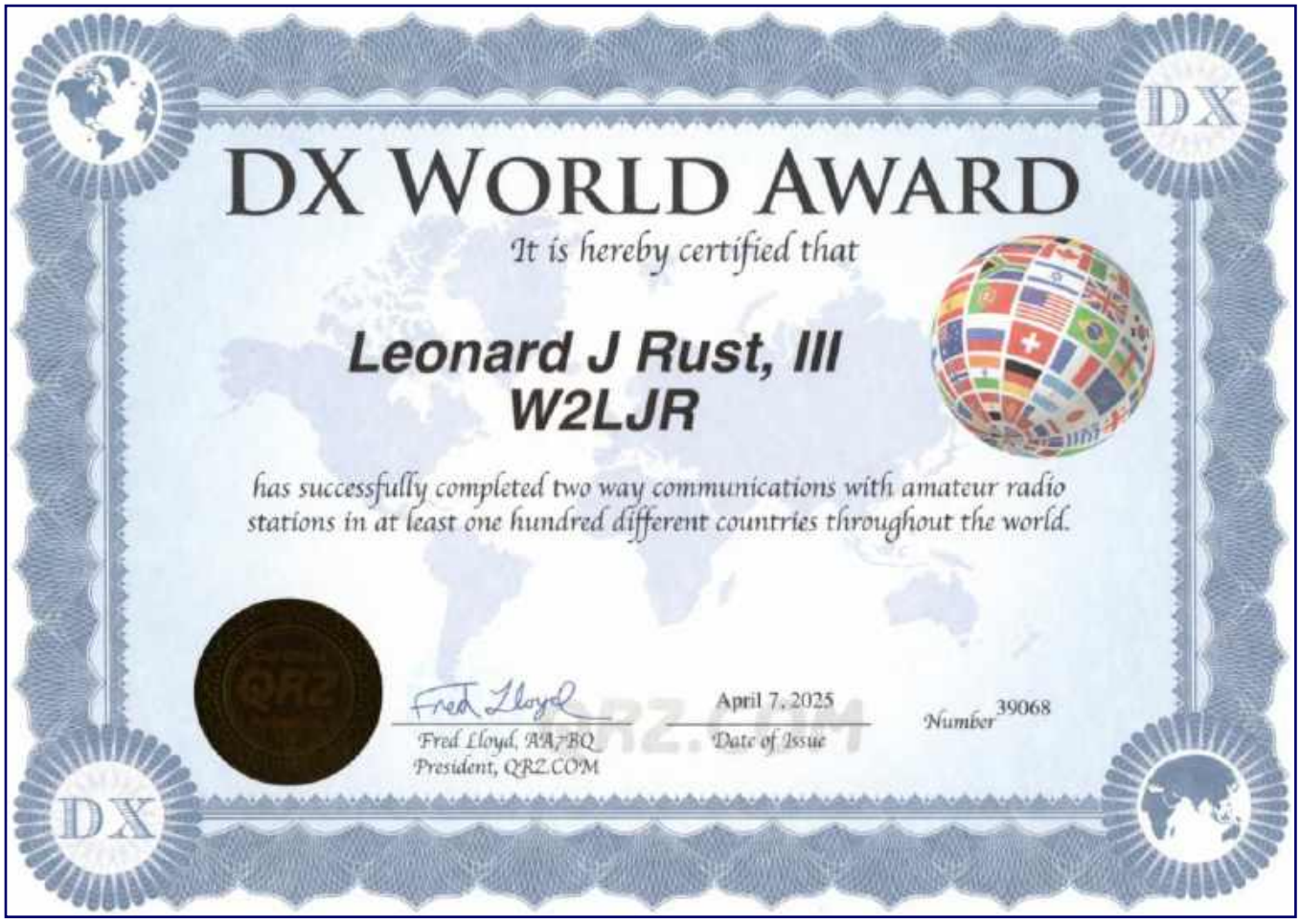
DMR Configuration Sequence

1. **Obtain and Configure DMR ID :**
   - **https://www.radioid.net**
2. **Download Contact List :**
   - **http://www.dmrcontacts.com**
3. **Identify Repeater or Hotspot :**
   - **https://www.repeaterbook.com**
4. **Define Talk Groups**
   - **Numerical ID**
   - **Text Name**

https://brandmeister.network/?page=talkgroups

5. **Create Channel**
   - **Select Number**
   - **Assign Name**
   - **Select DMR ID**
   - **Assign Frequency**
     - **Transmit**
     - **Receive**
     - **Bandwidth**
     - **Power**
     - **DMR Mode (Simplex/Repeater)**
     - **TX Permit (Channel Free)**
   - **Assign Talk Group**
   - **Assign Color Code**
     - **Agreed Upon with Other Users**
   - **Assign Time Slot**
   - **Agreed Upon with Other Users**
6. **Create Zone**
7. **Add Channels to Zones**
8. **Configure Features**
9. **Upload Code Plug**
10. **Upload Contact List**

If you recently changed your callsign, contact idteam@dmr-marc.net to have your DMR ID transferred to your new callsign.



Important Message For BrandMeister USA Hams Using a Radio ID Starting With 1

The **BrandMeister DMR** platform is a constantly evolving system, requiring regular optimizations and maintenance to ensure its efficiency, reliability, and alignment with **global open standards (https://www.itu.int/dms_pub/itu-t/opb/sp/T-SP-E.212B-2018-PDF-E.pdf)**.

As part of these ongoing efforts, we are addressing an issue that arose seven years ago regarding the assignment of improperly numbered Radio IDs. **As announced at that time (https://news.brandmeister.network/using-correctly-formatted-user-mcc-id-on-brandmeister)**, BrandMeister stopped importing invalid Radio IDs and requested that hams with such numbers obtain a new, properly formatted Radio ID.

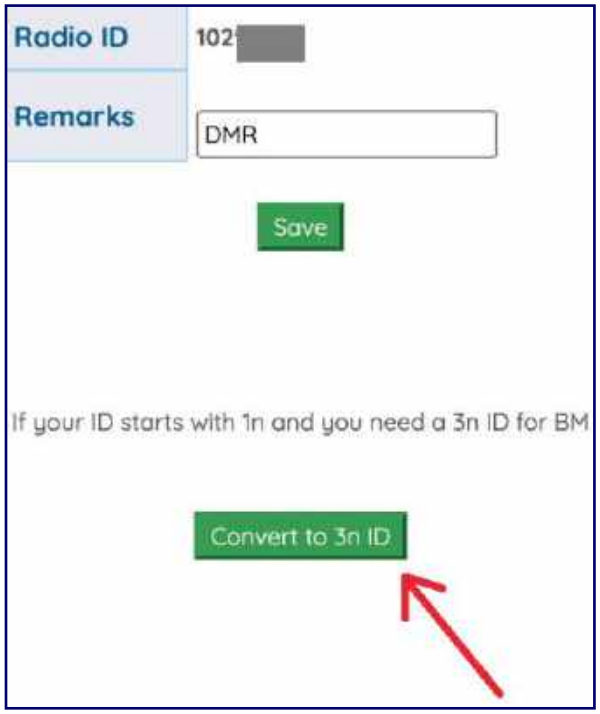
To facilitate operations, scripting, and automation on BrandMeister, we are now starting the complete removal of Radio IDs that do not comply with the internationally recognized MCC (Mobile Country Code) numbering system.

If you currently have a device connecting to BrandMeister with a Radio ID starting with the digit "1", please read the following carefully :

- **7-digit personal radio IDs starting with 1** (such as 1030512) will stop working on BrandMeister after January 1st 2026. If it is inactive for more than a couple of months, it will be purged sooner.
- **6-digit repeater radio IDs starting with 1** (such as 102765): while we don't have a set date for deprovisionning these IDs, we are urging sysop to migrate to a 31xxxx ID as soon as possible. If the repeater is offline for an extended period of time, it will be purged and will require a new properly formatted ID to re-connect.
- **5-digit CAP+ IDs** will stop working on BrandMeister by June 1st 2025.

IDs are issued by **Radioid.net (https://radioid.net)**, if you have an ID starting with 1, you need to log into your RadioID account and open a ticket requesting that your ID number be replaced with one starting with 3 Jan 28th update. RadioID added a feature to *"auto-magically"* convert your 1xxxxxx (1n) ID to the 3xxxxxx (3n) format :

- **Login to your RadioID (https://radioid.net/login) Dashboard**
- **Click on the 1n ID.**
- **You will then see a button to Convert to 3n. Click it.**
- **Once done, you will be returned to your dashboard and have a new 3n ID.**



For assistance, you may contact RadioID support at : https://radioid.net/support

2024-2028 Element 4 Amateur Extra Class License Question Quiz

This month we finish up with Subelement E2 Operating Procedures (5 exam questions - 5 groups).
(Answers on Last Page)

E2E01
Which of the following types of modulation is used for data emissions below 30 MHz?
A. DTMF tones modulating an FM signal
B. FSK
C. Pulse modulation
D. Spread spectrum

E2E02
Which of the following synchronizes WSJT-X digital mode transmit/receive timing?
A. Alignment of frequency shifts
B. Synchronization of computer clocks
C. Sync-field transmission
D. Sync-pulse timing

E2E03
To what does the "4" in FT4 refer?
A. Multiples of 4 bits of user information
B. Four-tone continuous-phase frequency shift keying
C. Four transmit/receive cycles per minute
D. All these choices are correct

E2E04
Which of the following is characteristic of the FST4 mode?
A. Four-tone Gaussian frequency shift keying
B. Variable transmit/receive periods
C. Seven different tone spacings
D. All these choices are correct

E2E05
Which of these digital modes does not support keyboard-to-keyboard operation?
A. WSPR
B. RTTY
C. PSK31
D. MFSK16

E2E06
What is the length of an FT8 transmission cycle?
A. It varies with the amount of data
B. 8 seconds
C. 15 seconds
D. 30 seconds

Element 4 Amateur Extra Class Quiz - Continued on page 37

E2E07
How does Q65 differ from JT65?
A. Keyboard-to keyboard operation is supported
B. Quadrature modulation is used
C. Multiple receive cycles are averaged
D. All these choices are correct

E2E08
Which of the following HF digital modes can be used to transfer binary files?
A. PSK31
B. PACTOR
C. RTTY
D. AMTOR

E2E09
Which of the following HF digital modes uses variable-length character coding?
A. RTTY
B. PACTOR
C. MT63
D. PSK31

E2E10
Which of these digital modes has the narrowest bandwidth?
A. MFSK16
B. 170 Hz shift, 45-baud RTTY
C. FT8
D. PACTOR IV

E2E11
What is the difference between direct FSK and audio FSK?
A. Direct FSK modulates the transmitter VFO
B. Direct FSK occupies less bandwidth
C. Direct FSK can transmit higher baud rates
D. All these choices are correct

E2E12
How do ALE stations establish contact?
A. ALE constantly scans a list of frequencies, activating the radio when the designated call sign is received
B. ALE radios monitor an internet site for the frequency they are being paged on
C. ALE radios send a constant tone code to establish a frequency for future use
D. ALE radios activate when they hear their signal echoed by back scatter

E2E13
Which of these digital modes has the highest data throughput under clear communication conditions?
A. MFSK16
B. 170 Hz shift, 45 baud RTTY
C. FT8
D. PACTOR IV

Electronic Tool Tip #14 - Solder Pot

By Chris Prioli, AD2CS - chris@ad2cs.com - www.ad2cs.com

If you find yourself having to tin a multitude of wire leads, as I often do, it may be time to make a small investment that will pay big dividends in time and performance.

Recently, I began offering a certain piece of test equipment for sale. In preparation of these units for sale, either as completed units or as buyer-assembled kits, it is necessary to strip and tin both ends of a total of twenty-four lengths of hook-up wire. Tinning that many wires can be quite tedious when done individually using a soldering iron. In addition, care must be taken to avoid the formation of any solder lumps, points, or drips on the leads, as they may need to fit into holes either on the PCB or in the connection tab of a jack, switch, and so forth. I wanted a better way of doing this, and that better way came in the form of a question asked by one of our fellow GCARC members. **Frank Romeo N3PUU** asked me if I was using a solder pot to tin the wires. Of course, I immediately reasoned, ***"Why not?".***

The solder pot that I chose is perfect for my needs. It has a 50mm diameter to its vessel, and the kit includes a spare vessel and a solder scraper paddle. The heat time is quite short. I used solid 63/37 Sn/Pb solder that I purchased in one-pound stick form, having cut four one-inch pieces from the stick. The solder was molten and ready to use in about five minutes. Vessel temperature is adjustable within the range of approximately 200°C to 450°C via a front panel potentiometer. Heating is by way of a nichrome wire that is wrapped around the vessel, which is in turn secured to the base via two machine screws. This arrangement makes it very difficult to overturn the vessel. This unit is rated at 150 watts and operates on 117VAC house current. The front panel has the temperature control and a power switch, which is illuminated when powered "ON". One gripe that I have is that the power switch is installed backwards to my expectations. I would expect the rocker to be "DOWN" on its near side in the "OFF" position; in practice, it is just the opposite.

The tinning process involves first stripping the desired length of the wire to be tinned, and then twisting the strands together tightly. Next, dip the bare end of the stripped wire into some liquid rosin flux, and then dip it into the molten solder and pull it right out. ***Voilá!*** A clean and uniformly tinned wire end is the result. Tinning a full set of twenty-four wires - meaning forty-eight tinned ends, took all of three minutes using this method, and the tinning job was perfectly achieved.

This solder pot is available online from Amazon, at a price of $16.47 (USD) plus shipping if you are not an Amazon Prime member. Of course, the government has to get its share, so tax will also be applied. Point your browser to **https://www.amazon.com/dp/B08V161KKH** if you want to investigate this item for yourself.

As a final note, I should point out that for the sake of convenience, I also purchased the consumable supplies - the solder and the flux - from Amazon. The solder, **https://www.amazon.com/dp/B0CDV5172Q**, came in at a whopping $32.99 per pound, and the flux, **https://www.amazon.com/dp/B005DNR01Q**, cost $18.24 for a 4.22 fluid ounce (125ml) bottle.

Regional Skywarn Websites For On-Line And In-Person Training Classes

Philadelphia/Mt Holly Skywarn : www.weather.gov/phi/skywarn
State College, PA Skywarn : www.weather.gov/ctp/skywarn
Pittsburgh, PA Skywarn : www.weather.gov/pbz/skywarn

Weather Information Nets & Frequencies

Hurricane Watch Net : www.hwn.org

- **Day Time : 14.325 MHz**
- **Night Time : 7.268 MHz**
- **Information : 14.300 MHz**

Local SKYWARN Frequencies :

- **Atlantic County : K2BR, 146.745 MHz (-) 146.2 Hz**
  - ◊ **Net Every Monday @ 1900 Hours**
- **Camden County : K2EOC, 146.895 MHz (-) 91.5 Hz**
  - ◊ **Net Every Thursday @ 2030 Hours**
- **Cumberland County : KE2CK, 146.805 MHz, (-) 118.8 Hz**
  - ◊ **Net Every Monday @ 1930 Hours**
- **Gloucester County : W2MMD, 147.180 MHz (+) 131.8 Hz**
  - ◊ **Net Every Sunday @ 1930 Hours**
- **Salem County : N2KEJ, 146.625 MHz (-) 131.8 Hz**

May 16, 17, 18, 2025
Greene County Fairgrounds & Expo Center, Xenia, OH
www.hamvention.org

Club Merchandise from the K2ZA Workshop
Contact John Zaruba Jr, K2ZA at k2za@icloud.com
Go To : https://gloucestercountyarc.weebly.com/club-merchandise.html

Volunteer Monitor Program Report : January 2025

The Volunteer Monitor (VM) Program is a joint initiative between ARRL and the FCC to enhance compliance in the Amateur Radio Service. This is the January 2025 activity report of the VM Program.

- A commendation was issued to an operator in Indiana for exceptional CW operation, and to an operator in Michigan for exceptional courtesy in choosing a frequency for net operation during crowded band conditions. A commendation was issued to an operator in New Jersey for exceptional operation as net control of a net meeting daily on 7.255 MHz.
- A Technician-class operator in Texas received an advisory for FT8 operation on 20 meters. Technicians have no privileges on 20 meters. A Technician-class operator in New York received an advisory for FT8 operation on 15 meters, a band on which there are no Technician privileges. A Delaware Technician-class operator received an advisory for FT8 operation on 12 meters, which allows no Technician operation.
- An operator in California received a second advisory regarding operation with an expired license.
- An operator in Tennessee received an advisory for operation on 7.200 MHz with a signal that extended from 7.194 to 7.205 MHz. Section 97.307(a) of the Commission's rules states, "No amateur station transmission shall occupy more bandwidth than necessary for the information rate and emission type being transmitted, in accordance with good amateur practice."
- Operators in Florida and New Jersey received advisories for lengthy periods of operation with no identification. Section 97.119(a) requires amateur stations to transmit the assigned call sign at the end of each communication and at least every 10 minutes during a communication.
- Operators in Louisiana and Arizona received advisories for operation with expired licenses.
- There was one FCC meeting and three case referrals from the FCC for monitoring.

The totals for December 2024 monitoring were 1,896 hours on HF frequencies, and 2,302 hours on VHF frequencies and above, for a total of 4,198 hours.

For the year 2024, Volunteer Monitors reported 21,331 hours of monitoring on HF frequencies, and 27,545 hours on VHF frequencies and above, for a total of 48,876 hours for the year.

Thanks to Volunteer Monitor Program Administrator Riley Hollingsworth, K4ZDH

May 1 - 17, 2025 National Police Week

Gloucester County Amateur Radio Club
General Membership Meeting Minutes
Wednesday, April 2, 2025

Meeting opened @ 1900 Hours by **President Jon Pearce, WB2MNF** with the Pledge of Allegiance to the Flag

Attendance :

- **In-person : 40**
- **Via Zoom : 16**

Visitors : Anthony Luscre, K8ZT

New Members :

- **Bryan Eveland, KM4SJS, National Park, NJ.**
- **Christopher Grabosky, KE2FIK, Delran, NJ.**

Announcements :

- May GM Meeting Program : "Introduction to VNA and NanoVNA" by **Alan Wolke W2AEW**
- June GM Meeting Program : "3D Printing in the Ham Shack" by **Richard Gopstein, KD2CQ**
- July GM Meeting Program : "Pizza Night"
- 2025 GCARC Family Picnic : Saturday, May 31, 2025 1100 To 1400 Hours, Red Bank Battlefield Park National Park, NJ. RSVP picnic@w2mmd.org
- Upcoming Clubhouse Events
  - Tech Saturday 4/5/25 : "PC Board Design from Concept to Hardware by **Chris Prioli AD2CS**"
  - May Tech Saturday : Group build project "Wideband Dummy Load with High Accuracy Watt-meter" sign up with **Chris Prioli AD2CS** cpprioli@gmail.com
  - License Testing : Thursday April 10th @ 6PM
  - GCARC BoD meeting : Wednesday 4/16 @ 7PM
  - Dinner at the Clubhouse : Wednesday 4/23 @ 6PM

Member current activities :

- **Jon Pearce WB2MNF** discussed Club DMR developments, Meshtastic, and FRAM2 SSTV mission.

Business Meeting :

- Minutes of March 2025 business meeting as published in CrossTalk were approved by voice vote of members present.

TREASURER'S REPORT :

- **2025 Year to Date Income and Expense**
  - **Income : $7,209.85**
  - **Expense : $1,281.22**
  - **Net : $5,928.63**

April 2025 General Membership Meeting Minutes - Continued on page 42

April 2025 General Membership Meeting Minutes - Continued from page 41

CLUBHOUSE REPORT :

- Report : **Al Arrison KB2AYU** discussed cable and pulley work on the VHF/UHF towers along with lightning protection.

FIELD DAY REPORT :

- Report : **Jim Wright N2GXJ** reported on preparations for 2025.

DX AND CONTESTS :

- Report : **Tony Starr K3TS** reported on April contests via Zoom. Details in CrossTalk.

PUBLIC SERVICE :

- Report : **Bob Keogh KD2NEC** discussed progress on the Red Cross EMCOMM trailer project. **Karl Frank W2KBF** reported on fuel maintenance issues for emergency generators.

EDUCATION COMMITTEE :

- Report : **Chris Prioli AD2CS** reported on a possible LC meter Club build.

TECHNICAL COMMITTEE :

- Report : **Jon Pearce WB2MNF** reported on STEM activities at Woodruff School.

NEW BUSINESS :

Motion to appropriate $500 for purchase of additional band pass filters for Field Day approved by voice vote of member's present.

PRESENTATION : "Beginner's Guide to VHF" by Anthony Luscre K8ZT (via Zoom)

Meeting adjourned @ 2004 Hours

Respectfully submitted,
John Zaruba K2ZA
Recording Secretary

Never Too Soon To Think About Volunteering For The Bike MS!

Bike MS : City To Shore Ride 2025
September 27 - 28, 2025

Bike MS : Bike To The Bay (Delaware) 2024
October 4, 2025

N3MSS Amateur Radio Communications
Bike MS Volunteers : www.n3mss.org

n3mss.org website not yet updated for 2025

Gloucester County Amateur Radio Club
Board of Directors Meeting Minutes
Wednesday, April 16, 2025

Meeting opened @ 1900 Hours by President Jonathan Pearce, WB2MNF

Attendance :

- **President Jon Pearce, WB2MNF : Present**
- **Vice President Ron Block, NR2B : Present**
- **Treasurer John O'Connell, K2QA : Present**
- **Recording Secretary John Zaruba Jr, K2ZA : Present**
- **Corresponding Secretary Mike Resnick, N2WOQ : Present**
- **Director (2023-2025) Chris Prioli, AD2CS : Present**
- **Director (2023-2025) James Wright, N2GXJ : Present**
- **Director (2024-2026) Al Arrison, KB2AYU : Present**
- Director (2024-2026) Bill Price, NJ2S :
- **Director (2025-2027) Jeffrey Garth, WB2ZBN : Present**
- **Director (2025-2027) Frank Romeo, N3PUU : Present**
- Trustee (2022-2025) Charles Lanard, KD2EIB :
- Trustee (2023-2026) Sheldon Parker, K2MEN :
- **Trustee (2024-2027) Len Rust, W2LJR : Present**
- **Trustee (2025-2028) Earl Moore, KC2NCH : Present**
- **Member Gary Reed, N2QEE : Present**
- **Member Karl Frank, W2KBF : Present**
- **Member Jerry Barnish, K2EAB : Present**
- **Member Beth Barnish, KB2EAL : Present**

New Member Applications :

- **Joshua Boylan, KE2FNA, Pitman, NJ**
- **Dan Goulianos, KE2BPK, Westville, NJ (Returning Member)**
- **Stephen Jordan, KB2RGZ, Turnersville, NJ (Returning Member)**
- **Paul Marchetto, W2NKJ, Villanova, PA**

Treasurer's Report :

- **Income : $7,856.25**
- **Expense : $2,642.27**
- **Net : $5,213.98**

Detailed financial statements are available for member review upon request.

Committees :

- **Clubhouse : Al Arrison KB2AYU** discussed tower maintenance issues, tentative antenna installation schedule.
- **Hamfest : Ron Block NR2B** provided a status update.

April 2025 Board of Directors Meeting Minutes - Continued on page 44

April 2025 Board of Directors Meeting Minutes - Continued from page 43

- **Holiday Party : Beth Barnish KB2EAL** discussed proposals for having the holiday party at a restaurant to relieve the burden on the Club members performing the catering. BoD approved the choice of the **Lamp Post Diner** in **Gloucester Township** on Wednesday, December 10, 2025.
- **Technical : Chris Prioli AD2CS** provided an update on the Wattmeter build project. **Jon Pearce WB2MNF** reported on upcoming Tech Saturday programs and status of the unlicensed Meshtastic node.
- **Programs : Jon Pearce WB2MNF** discussed putting videos of presentations on YouTube.
- **Education : Angela Metzger KE2DRJ** will be attending the ARRL Teacher's Institute. 5 Woodruff students in the MORE License program. **John O'Connell K2QA** recommended asking the general membership for a budget line item increase to keep spending compliant with the Club constitution.
- **Repeaters : Frank Romeo N3PUU** discussed the new DMR repeater in Glassboro.
- **Field Day : Jim Wright N2GXJ** reported on latest preparations for Field Day.
- **Membership : Jon Pearce WB2MNF** led discussion on member renewals / non-renewals.
- **Foxhunt Report : Jim Wright N2GXJ** reported the next fox hunt is Sunday, May 18, 2025.
- **VE Team Report : Chris Prioli AD2CS** reported on VE team activities and results.

Old Business :

- Motion to approve previous months minutes passed by voice vote of Club officers present.
- Motion to approve treasurers report passed by voice vote of Club officers present.

New Business :

- **Frank Romeo N3PUU** discussed preparations for the upcoming Club picnic.
- **Jon Pearce WB2MNF** proposed a summer activity for STEM kids that have received their ham license. Discussion of related issues (insurance, protection of minors, liability) ensued.

Meeting adjourned @ 2011 Hours

Respectfully Submitted,
John Zaruba Jr, K2ZA
Recording Secretary

Mark Gottlieb KK2L's Lab599 TX-500 Discovery HF Transceiver

See the next page for KK2L's CQ WPX Contest log using this radio

Mark Gottlieb, KK2L : March 29 & 30, 2025
CQ WW WPX Contest, SSB : 5 Watts
Lab599 TX-500 Discovery HF Transceiver
ZeroFive Vertical Antenna In My Evergreen Tree

Time	Call	Band	Freq	Mode	Grid^2	Country	Operator Name
20:03	IO4X	15M	21.434	SSB	JN62ks	Italy	Claudio "Claudio" Veroli
19:05	TM3P	15M	21.360	SSB	JN25pg	France	Didier Crochat
18:28	IW2HAJ	15M	21.325	SSB	JN45no	Italy	Claudio Salvi
18:19	WP3C	10M	28.506	SSB	FK68ph	Puerto Rico	Alfredo Velez Ramos
18:17	CQ7X	10M	28.519	SSB	IM67el	Portugal	Jose Lopes
18:16	EI7M	10M	28.529	SSB	IO51uv	Ireland	John Barry
14:52	II2S	10M	28.521	SSB	JN55fk	Italy	Patuzza Contest Team
14:51	HG7T	10M	28.519	SSB	KN07vn	Hungary	Érd Városi Rádióklub SE
14:49	OL730PLZ	10M	28.514	SSB	JN69qs	Czech Republic	730 Years of Plzen
14:47	HG5A	10M	28.512	SSB	JN97ln	Hungary	BKV Radio Club
14:46	OM7M	10M	28.508	SSB	JN98ep	Slovak Republic	Radioklub KAPA OM7M
14:44	IK3UNA	10M	28.504	SSB	JN55lj	Italy	Mirko Dall'Agnola
14:34	TM3P	10M	28.489	SSB	JN25pg	France	Didier Crochat
14:33	ES7A	10M	28.487	SSB	KO28sj	Estonia	Viljandi RC Contest Call
14:26	TM1C	10M	28.470	SSB	JN03mm	France	Jerry F4ARU
14:24	CQ9A	10M	28.464	SSB	IM12mt	Madeira Island	Valery Zhytkovich
14:20	SP8R	10M	28.455	SSB	KO10cb	Poland	Club Station at Secondary School SP8PCF
14:14	RU1A	10M	28.438	SSB	KO48vr	Russia	Contest Station
14:11	TM5DX	10M	28.420	SSB	IN97ak	France	Thobie Diego
14:06	DM0Y	10M	28.400	SSB	JO73ce	Germany	Contest Call
13:59	OT2A	10M	28.384	SSB	JO20lw	Belgium	Patrick Godderie
13:47	OT5A	10M	28.357	SSB	JO21hc	Belgium	Contest Club
13:41	DK5DQ	10M	28.349	SSB	JO31qh	Germany	Nicolas Exner
13:39	G8X	10M	28.336	SSB	IO80ew	England	Tim Hugill
13:31	EE5R	10M	28.310	SSB	IN80dj	Spain	Spanish Contest - Association Cultural Radioaficionados Costa Bla
01:42	S50K	20M	14.309	SSB	JN75cw	Slovenia	Marko Munih
01:42	CQ7DX	20M	14.319	SSB	IM59sr	Portugal	Contest Team
01:26	IO9A	20M	14.258	SSB	JM78Pd	Italy	Milazzo Contest Team
01:20	PW2F	20M	14.158	SSB	GG66gm	Brazil	Marcelo Pedretti
21:43	VP5E	15M	21.402	SSB	FL41ct	Turks and Caicos Islands	Kevin Thomas
21:41	PJ2T	15M	21.400	SSB	FK52kg	Curacao	Caribbean Contesting Consortium
21:34	D4DX	15M	21.335	SSB	HK76tu	Cape Verde	Emir Memic
20:45	CN3A	15M	21.295	SSB	IM61ap	Morocco	Contest Station
20:33	II2S	15M	21.259	SSB	JN55fk	Italy	Patuzza Contest Team
20:30	EA6URP	15M	21.248	SSB	JM19in	Balearic Islands	Unio Radioaficionats De Palma
20:28	IP9A	15M	21.220	SSB	JM68pd	Italy	Vittorio Conigliaro
20:28	J62K	15M	21.228	SSB	FK93mv	Saint Lucia	SLCC Saint Lucia Contest Club
20:27	EB5A	15M	21.214	SSB	IM97qx	Spain	Yuri Sakalouski
20:24	LU2DUV	10M	28.538	SSB	GF02su	Argentina	Agustin Vaquero
20:22	CN3A	10M	28.498	SSB	IM61ap	Morocco	Contest Station
20:12	PV2K	10M	28.383	SSB	GG56lc	Brazil	Leonardo Zucon Contest Call
20:10	CR3DX	10M	28.378	SSB	IM12ju	Madeira Island	Slovak Contest Group OM8A Contest Team

To Be Added To The DX HONOR ROLL or Update Your Number, Please Contact
Ernest Kraus, KD2EAV
meanddelcanotc@verizon.net

Name/Callsign	DXCC
Bill Grim W0MHK	352
Dave Strout W2YC	349
Edward De Fonzo W2DE	339
Darrell Neron AB2E	336
Bob Pantazes W2ARP	290
Gary Castellini N2IEC	280
Vinnie Sallustio N4NYY	275
John Hill W2HUV	271
Sheldon Parker K2MEN	269
Jim Wright N2GXJ	265
Ken Denson WB2P	248
Tony Starr K3TS	244
Dennis Sandole K2SE	231
Howard Marder WA2IBZ	158
Eric Morris N2BRJ	157
Art Strong KA0WS	157
Steve Farney W2SEF	147
Phil Nunzio WA3RGY	144
Rich Subers W2RHS	133
Ben Johnson NE2R	127
Bart Kleczynski AC2PT	124
Marc Federici WM2Y	117
Chuck Capasso WB2PGE	104
Harry Strahlendorf W3DNQ	103
Jim Clark KA2OSV	87
Lee Marino N2LAM	71
Updated As Of 04/21/2025	

Sunday, May 11, 2025

Hmm...It's Saturday and you want to know if someone is at the Clubhouse? Why not call and find out! What!!!

W2MMD Clubhouse : 856-244-6914

Yes, We Do Have Prince Albert In A Can!

Another FREE Clubhouse Resource Available To All Club Members

Training May Be Required : See Jon Pearce, WB2MNF For Details

Full Flower Moon - Saturday, May 12, 2025 @ 1256 Hours.

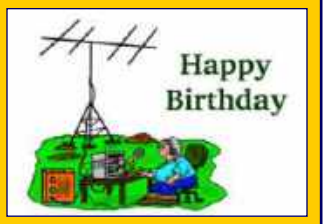
May's Flower Moon name should be no surprise; flowers spring forth across North America in abundance this month! "Flower Moon" has been attributed to Algonquin peoples, as confirmed by Christina Ruddy of The Algonquin Way Cultural Centre in Pikwakanagan, Ontario. May's Moon was also referred to as the "Month of Flowers" by Jonathan Carver in his 1798 publication, Travels Through the Interior Parts of North America: 1766, 1767, 1768 (pp. 250-252), as a likely Dakota name. Carver stayed with the Naudowessie (Dakota) over a period of time; his expedition covered the Great Lakes region, including Wisconsin and Minnesota areas. Henry David Thoreau sparked the Native American Moon names as well, referencing the Flower Moon and Carver when he wrote about Native Americans.

Old Farmer's Almanac - www.almanac.com

May Birthdays

Congratulations To Our Members Who Are Celebrating A Birthday This Month

Joshua Boylan, KE2FNA
Dan Caguiat, KV2N
Chuck Capasso, WB2PGE
Bob Ciotti Jr, KC3ZFT
Holden Correia-Fisher, KD2JPV
Mike Covaleski, N2MMC
Walt Coward, WX2E
Scott Dantis, AA2SD
Alex Duboski, KB2YEF
Adam Duncan, W3DUN
Peter Elias, KE2EGL
Melissa Guenther, KE2BWZ
Lee Hafele, WA2LH
Carmen Inverso, WA2TRS
Ben Johnson Sr, NE2R
Paul Johnston, KC3VTI
Brian Jones, KD2BXD
Bill Jones, KD2FHM
Joe Lee Jr, N2BNJ
Dennis McManus, W3IMA
Darrell Neron, AB2E (President 2005, 2006, 2007)
Rusty Rust, K2LJR
Tom Schmitt
Jacob Scholz, KC2QYT
Stan Slachetka, WA2JRZ
Tony Starr, K3TS (President 2021, 2022)



In Memoriam : May Birthdays

David Allin, N2TVR
Walton Ashton Jr, WB2OYQ
Burris Bauer
Frank DiSanto Jr, N2RHT
Bertha Farr Eggert, WA4BMC
William Farr III, AI2I
Hyman Friend, KB2GH
Ernest Gigliobianco, KB2AB
Richard Hackett, AA2RK
Edward Leibfarth, WA4AEX (Charter Member)
James Montagno, N2WHY

Roy Pitman "Bud" Peterson Jr, K2GHZ (Charter Member, Club Co-Founder)

James Scannell Jr, KB2GTT
Joseph Schneider, KB2SVJ
Herbert Telling, N2IZM
Charles Weiler, KA2OSW
Edward Wilson, WA2SXC

May 17, 2025 Armed Forces Day

CrossTalk Submissions

This is your Club Magazine. Make use of it.

If you have stories or photos of your hobby that you would like to share with the Club, please do so! We will keep covering all of the GCARC events, but it is also nice to get those personal perspectives to include in every issue. Connecting through experiences is what makes the Gloucester County Amateur Radio Club a *REAL* Club.

All submissions, queries, comments, and editorials should be addressed to :
Jeff Garth, WB2ZBN at djgrath1 <*at*> gmail <*dot*> com

Submission deadline for the June 2025 issue : Tuesday, May 20, 2025

Club Website www.w2mmd.org
Club E-Mail Reflector : GCARC <*at*> Mailman <*dot*> QTH <*dot*> Net

Announced DX Operations
www.ng3k.com/Misc/adxo.html
From The Shack of Bill Feidt, NG3K : www.ng3k.com

2025 Apr22	2025 May01	**Tanzania**	**5H1KB**	LoTW	DXW.Net 20250315	By DL2SBY fm Zanzibar I; HF; focus on 6m; low power; QSL via DL2SBY direct
2025 Apr25	2025 Apr28	**Thailand**	**E28AM/p**	LoTW	OPDX 20250227	By E20EHQ E21LLR E25GGT E25KFR E25VVE HS1JZT HS5NMF IV3GMZ fm Chang I (IOTA AS-125); 40-10m; CW SSB FT8; holiday style operation
2025 Apr25	2025 May07	**Austral Is**	**TX9A**	DK8ZZ	DXW.Net 20240927	By 9A2NA 9A3MR 9A9R DK8ZZ fm IOTA OC-152; HF
2025 Apr26	2025 Apr30	**French Polynesia**	**FO**	F4LYI	DXW.Net 20250313	By F4LYI as FO/F4LYI fm Petai I (IOTA OC-067); 40 20 15 10m; SSB; holiday style operation
2025 Apr29	2025 May03	**Svalbard**	**JW** NEW	DK1VK (B/d)	OPDX 20250409	By DK1VK as JW/DK1VK fm Spitsbergen I (IOTA EU-026); 160-10, mainly SSB; 100w; wires
May						
2025 May02	2025 May18	**Curacao**	**PJ2** NEW	eQSL	DXW.Net 20250410	By PD1DRE as PJ2/PD1DRE; 40 20 10m; SSB FT8 FT4
2025 May04	2025 May26	**Cape Verde Is**	**D4**	M0OXO	TDDX 20250220	By DF2WO as D44TWO and KN6ZZI as D44ZZI fm Ponta Achada; 160-10m, incl 60m; SSB CW FT8 FT4
2025 May07	2025 May14	**Guernsey**	**GU6EFW**	ON6EF (B/d)	ON6EF 20250216	By ON6EF ON1BN ON7TA ON6VJ ON9DJ ON7VM ON4AML fm IOTA-114; HF incl WARC bands; SSB CW + digital
2025 May09	2025 May11	**Guernsey**	**GU80LIB**	LoTW	425DXN 20250315	By Guernsey Amateur Radio Society; HF; QSL via Club Log OQRS
2025 May13	2025 May18	**Honduras**	**HR4**	PY8WW OQRS	OPDX 20250213	By PY8WW fm Tiger I (IOTA NA-060); 40-10m; CW SSB + digital
2025 May16	2025 May29	**Bonaire**	**PJ4M** NEW	LoTW	DXW.Net 20250415	By PH2M fm IOTA-006 (FK52uf); 80-10m; mainly FT8, some SSB; 100w; QSL via Club Log OQRS or PH2M direct (w/3 USD)
2025 May20	2025 May27	**Martinique**	**TO3E** NEW	LoTW	OPDX 20250409	By AB2E fm IOTA NA-107; focus on WARC and low bands; mainly CW, some FT8 RTTY; QRV for CQ WPX CW Contest; QSL via AB2E direct
2025 May22	2025 Jun01	**Palau**	**T8**	See Info	OPDX 20250228	By JF1GHX as T88FG and JK1SZX as T88SG fm Koror I (IOTA OC-009); 160-6m; SSB FT8; QSL T88FG via LoTW or JF1GHX direct, T88SG via JK1SZX Buro
2025 May27	2025 Jun02	**Niue**	**E6RS**	LoTW	DXW.Net 20250322	By ZL1RS fm Makefu; 6m, perhaps 10m; FT8 EME; QSL via ZL1RS
2025 May27	2025 Jun02	**St Barthelemy**	**FJ**	LoTW	DXW.Net 20250213	By NP4G as FJ/NP4G; HF; POTA activation BL-0001; holiday style operation

Also for your convenience, there is a direct link to NG3K on our website. Click on the NG3K DX Page.

CQ WPX RTTY Contest 2025
February 8, 2025

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : SOAB HP
QTH : SNJ
Operating Time (hrs) : 30
Location : USA

Summary :

Band	QSOs
80 :	87
40 :	498
20 :	166
15 :	224
10 :	486

Total : 1,461 Prefixes : 724
Total Score : 3,394,836

Club : Frankford Radio Club **015**

Comments :
Rig : K4D/OM Power 2000A+
Antennas :
80m dipole @ 95ft
40m XM-240 Yagi @ 75 ft
10m15m20m Force 12 C31XR @ 53ft on HG52SS tower, C3SS @ 52 on AB-577 military mast

Op time 30hrs. My first serious major RTTY contest. Took me a few contests to get the hardware, software, and operator all working together but it all worked this weekend. My highest score ever in a RTTY test, highest number QSOs also. RTTY has just become my 2nd most favorite mode for contesting (after CW). 40M at night and 10m mornings were the money bands with almost 1000Qs between the two. Condx on 80 were not that great either night, and it seemed most folks stayed on 40. Condx on 20 did not seem great either, with 10 and 15 staying open to EU well into both afternoons. Great to run into so many friends.

CU next weekend for ARRL DX! 73 Darrell AB2E

Contest : CQWPXRTTY

Band	QSOs	Pts	WPX	Pt/Q
3.5	87	256	19	2.9
7	498	2,112	359	4.2
14	166	377	40	2.3
21	224	564	82	2.5
28	486	1,380	224	2.8
Total	1,461	4,689	724	3.2

Score : 3,394,836
1 Mult = 2.0 Q's

ARRL DX Contest, CW 2025
February 15, 2025

Call : W2YC
Operator (s) : W0MHK W2YC
Station : W2YC

Class : M/S HP
QTH : NJ
Operating Time (hrs) : 31
Location : USA

Summary :

Band	QSOs	Mults
160 :	41	30
80 :	119	55
40 :	313	83
20 :	316	87
15 :	347	94
10 :	406	96

Total : 1,541 445
Total Score : 2,057,235

Club : Frankford Radio Club **020**

ARRL DX Contest, CW 2025
February 15, 2025

Call : NE2R
Operator (s) : NE2R
Station : NE2R

Class : SOAB LP
Class Overlay : Limited-Ant
QTH : SNJ
Operating Time (hrs) : 20
Location : USA

Summary :

Band	QSOs	Mults
40 :	131	390
20 :	91	273
15 :	125	375
10 :	153	459

Total : 500 1,497
Total Score : 275,448

Club : Frankford Radio Club **019**

Comments :
This was my first participation with the Frankford Radio Club and the my first DX Contest. All S&P with 100 watts and dipoles as it's always been. The plan was to bring an amplifier into the station for the first time ever, but it arrived Wednesday with an error and was promptly sent back. Looking forward to November.

ARRL DX Contest, CW 2025
February 15, 2025

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : SOUAB HP
QTH : SNJ
Operating Time (hrs) : 30
Location : USA

Summary :

Band	QSOs	Mults
160 :	22	20
80 :	199	64
40 :	479	90
20 :	256	90
15 :	607	101
10 :	446	104
Total :	2,009	469

Total Score : 2,821,035

Club : Frankford Radio Club **017**

Comments :
Rig : FTDX-9000D/OM Power 2000A+ amp
Antennas :
160m Inverted-L over 100ft tree RX antenna - HiZ4 vertical array
80m dipole @ 95ft
40m XM-240 Yagi @ 75ft on EZWay RBX-70 crankup tower
10m,15m,20m - Force12 C31XR @ 53ft on Hygain HG-52SS crankup tower. Force 12 C3SS @ 52ft on military mast

Operating time : 30 hours

Wow, amazing condx all bands, except 160 was not that good for me. I did manage a few EU stations Fri evening for 20 mults on that band. Incredible runs on all bands 10-80m at various times. Sat night saw a great run on 80m. Both nights great runs on 40m for EU, worked every mult I could hear. 40m opened to EU early on Sun afternoon about 330P, and had a great run going then.

A number of stations were worked on 6 bands, many on 5, that hasn't happened in awhile. 5Z4VJ on 4 bands, ZP6/N3BNA on 4 bands, VP9I and several others on 6 bands. The pair of new crankup towers and Yagis are game changers at this QTH. Leaving the 2nd high band Yagi on South America/Carib works great, I just press 2 buttons back and forth on the auto-switch, and instant direction change. The big Yagi stays on EU and turns for Asia.

Made my goal of 2000Qs in the final hour. Would have easily made 3meg if I didn't lose 2 hours prime morning 10m run time Sun AM due to a tenant emergency. This score is a lifetime high from the home QTH.

See u all in 2 weeks for ARRL DX SSB!
73 Darrell AB2E

ARRL DX Contest, CW 2025
February 15, 2025

Call : K3TS
Operator (s) : K3TS
Station : K3TS

Class : SOUAB HP
QTH : WPA
Operating Time (hrs) : 30
Location : USA

Summary :

Band	QSOs	Mults
160 :	34	30
80 :	91	54
40 :	235	72
20 :	211	81
15 :	270	95
10 :	535	105
Total :	1,376	437

Total Score : 1,803,936

Club : Frankford Radio Club **018**

Comments :
Fell a bit short of my goal, and just about tied my best score from two years ago. I missed about four hours from my usual operating time, due to a few more daily chores here vs. the old QTH, so I will have to just adjust to it. I am still getting used to being able to hear weak signals, something I never had to deal with before, so there is plenty of adjusting to be done anyway. Crazy weather conditions played havoc at times, but I stayed on the air as long as I could stay awake. Never ran out of spots to be worked, and had a few good runs when I was up to it.

Thanks to all the DX for calling in and being on the air for the whole weekend.

Looking forward to the SSB weekend coming up.

Until then 73 and good DX to all.

de K3TS

Contest : ARRLDXCW

Band	QSOs	Pts	Cty	Pt/Q
1.8	22	66	20	3.0
3.5	199	594	64	3.0
7	479	1,428	90	3.0
14	256	768	90	3.0
21	607	1,821	101	3.0
28	446	1,338	104	3.0
Total	2,009	6,015	469	3.0

Score : 2,821,035
1 Mult = 4.3 Q's

CQ 160 Meter Contest, SSB 2025
February 21, 2025

Call : K3TS
Operator (s) : K3TS N4NYY
Station : K3TS

Class : Multi-Op HP
QTH : Pennsylvania
Operating Time (hrs) : 8:00
Location : USA

Summary :
Total : QSOs : 319 State/Prov : 48 Countries : 4
Total Score : 37,752

Club : Frankford Radio Club **023**

Comments :
Guest op N4NYY joined me at my station for my first try at running a multi-op, and his first try at operating on the 160m band. Conditions and participation could have been better, but we had fun and learned a lot. Not much DX was heard, but we worked what we could hear, or rather, what could hear us. The equipment and antennas worked without any problems, and my XYL kept us fed. All in all, a nice way to spend a Saturday night. 73 and see everyone next week for ARRL DX SSB. de K3TS

Rig - Kenwood TS-590sg Amp - ACOM 2000a RX Ant - 80m Dipole TX Ant - Inverted L : 45 feet of vertical tubing, 90 ft top wire, 30 radials all 50 ft long.

ARRL DX Contest, SSB 2025
March 1, 2025

Call : K2SE
Operator (s) : K2SE
Station : K2SE

Class : SOUAB HP
Class Overlay : Limited-Ant
QTH : SNJ
Operating Time (hrs) : 16
Location : USA

Summary :

Band	QSOs	Mults
80 :	23	19
40 :	90	43
20 :	117	48
15 :	250	67
10 :	164	67
Total :	646	245

Total Score : 473,340

Club : Frankford Radio Club **027**

CQ 160 Meter Contest, SSB 2025
February 21, 2025

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : Single Op Assisted HP
QTH : SNJ
Operating Time (hrs) : 2.5
Location : USA

Summary :
Total : QSOs : 102 State/Prov : 26 Countries : 0
Total Score : 6,084

Club : Frankford Radio Club **022**

Comments :
Rig : FTDX-9000D/OM Power 2000A+
Antenna :
160m Inverted-L over 100ft tree
RX Antenna: HiZ4 60ft 4-square

Miserable condx both nights. Barely eked out 100Qsos, a few on CQ, the rest S&P. Farthest west worked CO. Basically just East Coast and some midwest. 1 FL. Thanks for the Qs and see u next weekend in ARRL DX SSB! 73 Darrell AB2E

Contest : CQ160SSB

Band	QSOs	Pts	StP	DXC	Pt/Q
1.8	102	234	26	0	2.3
Total	102	234	26	0	2.3

Score : 6,084
1 Mult = 3.9 Q's

ARRL DX Contest, SSB 2025
March 1, 2025

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : SOUAB HP
QTH : SNJ
Operating Time (hrs) : 31
Location : USA

Summary :

Band	QSOs	Mults
160 :	13	12
80 :	97	53
40 :	138	63
20 :	271	88
15 :	536	97
10 :	861	111
Total :	1,916	424

Total Score : 2,437,152

Club : Frankford Radio Club **026**

Comments :
Rig : FTDX-9000D/OM Power 2000A+ amp
Antennas :
160m Inverted L over 100ft tree/RX ant HiZ4 4-square
75m Dipole @ 90ft
40m XM-240 Yagi @ 75ft
10m,15m,20m Force 12 C31XR @ 52ft
" " C3SS @ 52ft

Wow, decent condx for the most part. Fabulous runs on 10m, Sat was the best, Sun not quite as good, but band stayed open later. I was still working EU on 15m after 4PM. Low bands a big disappointment. Shortage of multipliers, worked most everything I could find, but 160 was bad here. DXCC on 10m w/ 111 countries, close to 900 QSOs. Missed my goal of 2000Qs by 75, but did make my goal of breaking 2Meg. The new N1MM bad spot killer by K3CT is a game changer. Now most everything remaining on the cluster is a real station and workable. Last big contest of the season! Gearing up for WPX CW in May, I will be at the FM5BH QTH, call to be determined. Thanks to many friends who called in and worked us on many bands. 73 Darrell AB2E

Contest : ARRLDXSSB

Band	QSOs	Pts	Cty	Pt/Q
1.8	13	39	12	3.0
3.5	97	291	53	3.0
7	138	414	63	3.0
14	271	813	88	3.0
21	536	1,608	97	3.0
28	861	2,583	111	3.0
Total	1,916	5,748	424	3.0

Score : 2,437,152
1 Mult = 4.5 Q's

ARRL DX Contest, SSB 2025
March 1, 2025

Call : K3TS
Operator (s) : K3TS
Station : K3TS

Class : SOUAB HP
QTH : WPA
Operating Time (hrs) : 33
Location : USA

Summary :

Band	QSOs	Mults
160 :	8	7
80 :	55	43
40 :	102	50
20 :	279	82
15 :	412	93
10 :	664	110
Total :	1,520	385

Total Score : 1,755,600

Club : Frankford Radio Club **028**

Comments :
Beat my previous best ARRL SSB score by about 350k, so not a bad effort overall. Conditions seemed pretty good, but it seemed like participation might have been down, at least for the DX stations. Had a few good runs, totaling about 300 Qs, and the rest was all S&P. Problems with the DX clusters caused some hair-pulling, but for the most part, they were worth the effort to use. This was the final big DX contest of my first year at the new QTH, and I am very happy to be able to hear the weak signals most of the time, thanks to the low noise levels. Unless the farmers around here start putting up solar panels, we should be good for a while keeping things quiet. Thanks to all the DX for the Qs, and see you all next time around.

73 de K3TS

Rural hilltop location at 1600 feet ASL

Tower : Rohn 45g 88 feet plus mast. Tri-bander: Force 12 C19xr at 90 feet. 80-40 Dipoles w/ common feed at 65 feet. 160 Inverted L 45 up and 90 out.

Rig : Kenwood TS-590sg Amplifier: ACOM 2000a

May 8, 2025 World Red Cross Day

May 2025 Contest Calendar - WA7BNM Contest Calendar : www.contestcalendar.com

May 2025	
Walk for the Bacon QRP Contest	0000Z-0100Z, May 1 and 0200Z-0300Z, May 2
CWops Test (CWT)	0300Z-0400Z, May 1
CWops Test (CWT)	0700Z-0800Z, May 1
AGCW QRP/QRP Party	1300Z-1900Z, May 1
NRAU 10m Activity Contest	1800Z-1900Z, May 1 (CW) and 1900Z-2000Z, May 1 (SSB) and 2000Z-2100Z, May 1 (FM) and 2100Z-2200Z, May 1 (Dig)
SKCC Sprint Europe	1900Z-2100Z, May 1
NCCC FT4 Sprint	0100Z-0130Z, May 2
Weekly RTTY Test	0145Z-0215Z, May 2
NCCC Sprint	0230Z-0300Z, May 2
K1USN Slow Speed Test	2000Z-2100Z, May 2
10-10 Int. Spring Contest, CW	0001Z, May 3 to 2359Z, May 4
RCC Cup	0300Z-0859Z, May 3
SBMS 2.3 GHz and Up Contest and Club Challenge	0600 local, May 3 to 2359 local, May 4
Microwave Spring Sprint	0800-1400 local, May 3
F9AA Cup, PSK	1200Z, May 3 to 1200Z, May 4
ARI International DX Contest	1200Z, May 3 to 1159Z, May 4
7th Call Area QSO Party	1300Z, May 3 to 0700Z, May 4
Indiana QSO Party	1500Z, May 3 to 0300Z, May 4
Delaware QSO Party	1700Z, May 3 to 2359Z, May 4
New England QSO Party	2000Z, May 3 to 0500Z, May 4 and 1300Z-2400Z, May 4
WAB 7 MHz Phone	1000Z-1400Z, May 4
MIE 33 Contest	2300Z, May 4 to 0300Z, May 5
K1USN Slow Speed Test	0000Z-0100Z, May 5
ICWC Medium Speed Test	1300Z-1400Z, May 5
OK1WC Memorial (MWC)	1630Z-1729Z, May 5
ICWC Medium Speed Test	1900Z-2000Z, May 5
ARS Spartan Sprint	0100Z-0300Z, May 6
Worldwide Sideband Activity Contest	0100Z-0159Z, May 6
ICWC Medium Speed Test	0300Z-0400Z, May 6
Phone Weekly Test	0230Z-0300Z, May 7
A1Club AWT	1145Z-1300Z, May 7
CWops Test (CWT)	1300Z-1400Z, May 7
Mini-Test 40	1700Z-1759Z, May 7
VHF-UHF FT8 Activity Contest	1700Z-2100Z, May 7
Mini-Test 80	1800Z-1859Z, May 7
CWops Test (CWT)	1900Z-2000Z, May 7
CWops Test (CWT)	0300Z-0400Z, May 8
CWops Test (CWT)	0700Z-0800Z, May 8
NCCC FT4 Sprint	0100Z-0130Z, May 9
Weekly RTTY Test	0145Z-0215Z, May 9
NCCC Sprint	0230Z-0300Z, May 9
K1USN Slow Speed Test	2000Z-2100Z, May 9
FISTS Saturday Sprint	0000Z-2359Z, May 10
SKCC Weekend Sprintathon	1200Z, May 10 to 2400Z, May 11
CQ-M International DX Contest	1200Z, May 10 to 1159Z, May 11
VOLTA WW RTTY Contest	1200Z, May 10 to 1200Z, May 11
Canadian Prairies QSO Party	1700Z, May 10 to 0300Z, May 11
50 MHz Spring Sprint	2300Z, May 10 to 0300Z, May 11
K1USN Slow Speed Test	0000Z-0100Z, May 12
4 States QRP Group Second Sunday Sprint	0000Z-0200Z, May 12
ICWC Medium Speed Test	1300Z-1400Z, May 12
OK1WC Memorial (MWC)	1630Z-1729Z, May 12
ICWC Medium Speed Test	1900Z-2000Z, May 12
RSGB 80m Club Championship, SSB	1900Z-2030Z, May 12
Worldwide Sideband Activity Contest	0100Z-0159Z, May 13
ICWC Medium Speed Test	0300Z-0400Z, May 13
DARC FT4 Contest	1900Z-2029Z, May 13
Phone Weekly Test	0230Z-0300Z, May 14
A1Club AWT	1145Z-1300Z, May 14
CWops Test (CWT)	1300Z-1400Z, May 14
Mini-Test 40	1700Z-1759Z, May 14
VHF-UHF FT8 Activity Contest	1700Z-2100Z, May 14
Mini-Test 80	1800Z-1859Z, May 14
CWops Test (CWT)	1900Z-2000Z, May 14
Walk for the Bacon QRP Contest	0000Z-0100Z, May 15 and 0200Z-0300Z, May 16

May 2025 Contest Calendar - Continued on page 55

May 2025 Contest Calendar - Continued from page 54

CWops Test (CWT)	0300Z-0400Z, May 15
CWops Test (CWT)	0700Z-0800Z, May 15
NTC QSO Party	1900Z-2000Z, May 15
NCCC FT4 Sprint	0100Z-0130Z, May 16
Weekly RTTY Test	0145Z-0215Z, May 16
NCCC Sprint	0230Z-0300Z, May 16
K1USN Slow Speed Test	2000Z-2100Z, May 16
UN DX Contest	0600Z-2100Z, May 17
NZART Sangster Shield Contest	0800Z-1100Z, May 17 and 0800Z-1100Z, May 18
Feld Hell Sprint	1200Z-1600Z, May 17
His Maj. King of Spain Contest, CW	1200Z, May 17 to 1200Z, May 18
EU PSK DX Contest	1200Z, May 17 to 1200Z, May 18
Arkansas QSO Party	1400Z, May 17 to 0200Z, May 18
Baltic Contest	2100Z, May 17 to 0200Z, May 18
FISTS Sunday Sprint	0000Z-2359Z, May 18
Run for the Bacon QRP Contest	2300Z, May 18 to 0100Z, May 19
K1USN Slow Speed Test	0000Z-0100Z, May 19
ICWC Medium Speed Test	1300Z-1400Z, May 19
OK1WC Memorial (MWC)	1630Z-1729Z, May 19
ICWC Medium Speed Test	1900Z-2000Z, May 19
RSGB FT4 Contest	1900Z-2100Z, May 19
Worldwide Sideband Activity Contest	0100Z-0159Z, May 20
ICWC Medium Speed Test	0300Z-0400Z, May 20
Phone Weekly Test	0230Z-0300Z, May 21
A1Club AWT	1145Z-1300Z, May 21
CWops Test (CWT)	1300Z-1400Z, May 21
VHF-UHF FT8 Activity Contest	1700Z-2100Z, May 21
Mini-Test 40	1700Z-1759Z, May 21
Mini-Test 80	1800Z-1859Z, May 21
CWops Test (CWT)	1900Z-2000Z, May 21
RSGB 80m Club Championship, Data	1900Z-2030Z, May 21
NAQCC CW Sprint	0030Z-0230Z, May 22
CWops Test (CWT)	0300Z-0400Z, May 22
CWops Test (CWT)	0700Z-0800Z, May 22
NCCC FT4 Sprint	0100Z-0130Z, May 23
Weekly RTTY Test	0145Z-0215Z, May 23
NCCC Sprint	0230Z-0300Z, May 23
K1USN Slow Speed Test	2000Z-2100Z, May 23
CQ WW WPX Contest, CW	0000Z, May 24 to 2359Z, May 25
K1USN Slow Speed Test	0000Z-0100Z, May 26
QRP ARCI Hootowl Sprint	0000Z-0100Z, May 26
ICWC Medium Speed Test	1300Z-1400Z, May 26
QCX Challenge	1300Z-1400Z, May 26
OK1WC Memorial (MWC)	1630Z-1729Z, May 26
ICWC Medium Speed Test	1900Z-2000Z, May 26
QCX Challenge	1900Z-2000Z, May 26
Worldwide Sideband Activity Contest	0100Z-0159Z, May 27
QCX Challenge	0300Z-0400Z, May 27
ICWC Medium Speed Test	0300Z-0400Z, May 27
SKCC Sprint	0000Z-0200Z, May 28
Phone Weekly Test	0230Z-0300Z, May 28
A1Club AWT	1145Z-1300Z, May 28
CWops Test (CWT)	1300Z-1400Z, May 28
Mini-Test 40	1700Z-1759Z, May 28
Mini-Test 80	1800Z-1859Z, May 28
CWops Test (CWT)	1900Z-2000Z, May 28
CWops Test (CWT)	0300Z-0400Z, May 29
CWops Test (CWT)	0700Z-0800Z, May 29
QRP Minimal Art Session	1400Z-2200Z, May 29
RSGB 80m Club Championship, CW	1900Z-2030Z, May 29
PODXS 070 Club Three Day Weekend Contest	0000Z, May 30 to 2359Z, Jun 1
NCCC FT4 Sprint	0100Z-0130Z, May 30
Weekly RTTY Test	0145Z-0215Z, May 30
NCCC Sprint	0230Z-0300Z, May 30
PVRC Reunion	2000Z-2300Z, May 30
K1USN Slow Speed Test	2000Z-2100Z, May 30
Feld Hell Sprint	0000Z-2359Z, May 31
Russian WW MultiMode Contest	1200Z, May 31 to 1159Z, Jun 1

Old Barney Amateur Radio Club
HAM FEST AT THE SHORE
SATURDAY MAY 3, 2025
SURF CITY VOLUNTEER FIRE COMPANY
713 LONG BEACH BLVD SURF CITY, NJ 08008
8:00AM-1:00PM - VENDOR SET UP 7:00AM
DOOR PRIZES!
Admission Fee: $5
NON-HAM SPOUSES AND KIDS FREE!
Indoor Vendor Table - $15 - Includes table and 1 Admission
Outside Vendor - $10 - 1 Parking Space Area, No Tables Provided
Vendor space limited - first come, first serve.
Food and Drink Available * Benefits Surf City Vol. Fire Company
WALLY'S
breakfast • lunch • dinner
15% OFF
With Event Ticket
TALK IN FREQUENCY
146.835
127.3 PL
VE SESSION - 10:00AM - $15 FEE
CONTACT RICHARD KENNARD, N2RPQ
FRN NUMBER AND PHOTO ID REQUIRED
Obtain FRN Number at FCC.GOV
QUESTIONS? Contact Ira, N2WAA
hamfest@obarc.org - 201.741.5330
ARRL
The National Association for Amateur Radio
FUNC
CALL

WARMINSTER AMATEUR RADIO CLUB

2025 HAMFEST & ARRL EPA SECTION CONVENTION

Sunday, May 4, 2025 (rain or shine)

Gate opens at 7am (6am for vendors)

LOCATION:

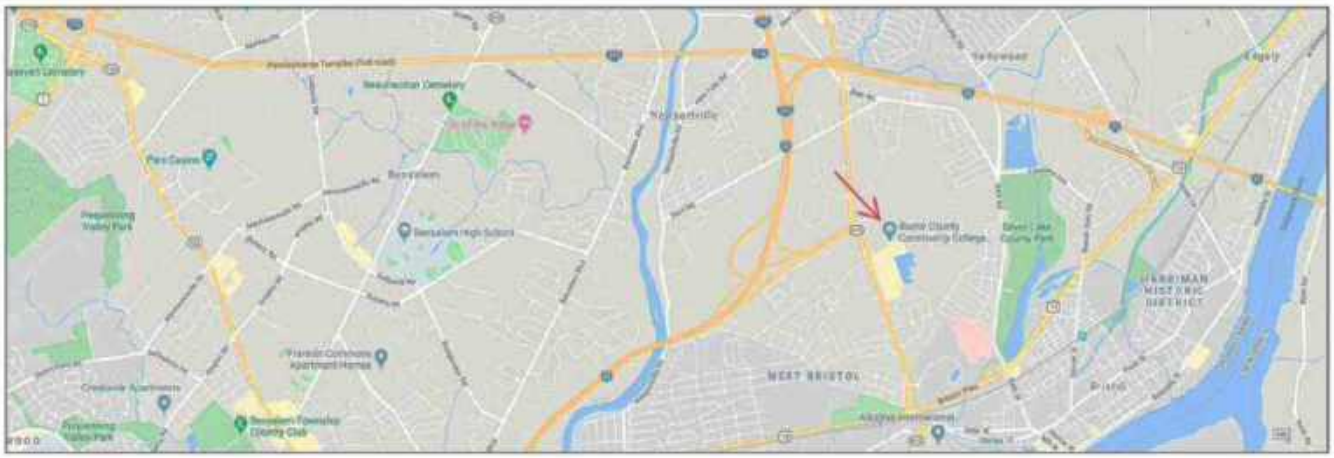
Bucks County Community College - Lower Bucks Campus
1304 Veteran's Hwy (Route 413)
Bristol, PA 19007

GPS Coordinates:
Latitude: 40.112755 | Longitude: -74.876504

Talk-in 147.09+ (131.8) / 443.95+ (131.8)

- New & Used Ham Radio & PC Equipment
- Equipment check-out table
- VE Testing at 10:00 am
- DXCC card checking
- Door prizes every hour
- Food service available
- ARRL Guest Speaker
  (See K3DN website: www.k3dn.org for announcement of speakers and times)

- Gate admission: $8/person
- Unlicensed spouses & under 13 free
- Student free with valid ID
- Handicap parking available
- Tailgating: $10/car-width space (plus admission)
- Indoor tables: $20/table (plus admission)



K3DN Warminster Amateur Radio Club

For more info:
Web: www.k3dn.org
Contact: hamfest@k3dn.org

ARRL SANCTIONED HAMFEST

Splitrock Amateur Radio Association

2025 New Jersey Tailgate Hamfest

Sunday May 18th 2025

Landing Park Recreation Complex
165 Landing Rd, Landing, NJ 07850

GPS Location: N40.90145, W74.66734

SPLITROCK
AMATEUR RADIO ASSOCIATION

Talk-In

***WS2R/R ***
146.985
146.385 input
PL 131.8

146.520
SIMPLEX

- *Many Great Vendors*
- *Door Prizes*
- ***Plenty of Parking!***
- *Great Location*
- ***Easy to Reach from Routes I-80, I-280, I-287, US-46 and RT-10***

Gates Open

Vendors: 6:00 AM
Buyers: 8:00 AM

Admission

- Buyers/Sellers $7.00
- Tailgating $20.00 up to 5 spaces
- Tail Gate purchase includes **ONE** Admission
- Non-Ham YL's and Harmonics Free

General Information

Splitrock Amateur Radio Association
PO Box 528
Lake Hopatcong, NJ 07849

Vendor Information

Use the form online under Hamfest
On the Internet
Email: hamfest@splitrockara.org

Ham radio, communications equipment, antique radio, audio Equipment, Computer hardware and software, electronic parts supplies, tools. Are sold at this event

2025 Club Committees

Standing Committees	Committee Chairs
Budget	**John O'Connell, K2QA**
Constitution & By-Laws	**Ron Block, NR2B**
Education	**Chris Prioli, AD2CS**
Field Day	**Jim Wright, N2GXJ**
Hamfest	**Ron Block, NR2B**
Health, Welfare, & Silent Keys	**Bill Price, NJ2S**
Hospitality	**Jeff Garth, WB2ZBN**
Membership & Membership Badges	**Chris Prioli, AD2CS**
Publicity	**Mike Resnick, N2WOQ**
Repeaters	***Open Chair***
Volunteer Examiner Liaison	**Chris Prioli, AD2CS**
W2MMD Clubhouse Site	**Al Arrison, KB2AYU**

Activity Committees	Committee Chairs
Awards & Certificates	**GCARC Board of Directors**
Club Photographer	**Phil Nunzio, WA3RGY**
Club Publications & Historian	**Jeff Garth, WB2ZBN**
Contests	**Tony Starr, K3TS**
GCARC Foxhunts	**Jim Wright, N2GXJ**
GCARC Picnic	**Frank Romeo, N3PUU**
GC-ARES Emergency Coordinator	**Bob Keogh, KD2NEC**
Holiday Dinner Party	**Beth Barnish, KB2EAL**
Membership Roster Database	**Jeff Garth, WB2ZBN**
Nominations	**Jon Pearce, WB2MNF**
Programs : General Membership Meetings	**Ron Block, NR2B**
Radio Nets	***Open Chair***
Technical (Tech Saturday, TechNets)	**Jon Pearce, WB2MNF**
W2MMD License Trustee	**Darrell Neron, AB2E**
W2MMD Special Event Station	**Mark Gottlieb, KK2L**

GCARC <*at*> Mailman <*dot*> QTH <*dot*> Net e-mail reflector guidelines

1. **No attachments** (e.g. pictures, files) are allowed on the reflector.
2. If you have Club-related pictures that you would like to share, you can send them to the webmaster, he will put them on the website and will send out a general e-mail to all the members.
3. Otherwise, the pictures will have to be sent to the members' addresses.
4. URLs/Hyperlinks are acceptable on the reflector.
5. Do not send any messages with e-mail addresses in the **BCC** (**Blind Carbon Copy**) field. The message will be rejected. Use only the **To:** or **CC:** fields.
6. Members are subscribed to the reflector using the member's e-mail address from the roster database. You must use that address when sending an e-mail via the reflector.
7. If you use another address on the reflector, the message will get rejected or "*bounced*", because the reflector does not recognize that address. Whenever a message sent to reflector is rejected or *"bounced"* for various reasons, the administrator has to log-in to the Mailman.QTH website and approve the message.

The W2MMD Repeaters

2 Meter Repeater
Output : 147.180 MHz
Input : 147.780 MHz
Offset : +600 kHz - PL : 131.8 Hz
(Conventional FM plus C4FM Capability)
EchoLink : W2MMD-R

70 cm Repeater
Output : 442.100 MHz
Input : 447.100 MHz
Offset : +5 MHz - PL : 131.8 Hz
(Conventional FM plus C4FM Capability)

The above repeaters are both
located in Pitman, NJ
GPS : 39.728481°, -75.131088°

1.25 Meter Repeater
Output : 224.660 MHz
Input : 223.060 MHz
Offset : -1.6 MHz - PL : 131.8 Hz
Location : Sewell, NJ
GPS : 39.746738°, -75.077094°

SKYWARN™ Net
Sunday @ 1930 : 147.180 MHz Repeater

Gloucester County ARES Net
Sunday @ 2000 : 147.180 MHz Repeater

GCARC TechNet ZOOM Forum
Available Every Monday @ 1930 Hours
Join ZOOM Meeting Link :
https://bit.ly/3K8bWwj

Tuesday AfterNoon 2M Net @ 1200 Hours

Monday & Thursday Night 40M Net
1930 Hours
7.175 MHz (- 5 or 10 kHz)

Thursday 2M Net @ 2000 Hours

All 2 Meter Nets Are Also On EchoLink :
W2MMD-R

Meeting Calendar

General Membership Meeting
Wednesday, May 07, 2025
1900 Hours
Pfeiffer Community Center
Simulcast Live on ZOOM
Meeting ID : 914 7364 1808
Passcode : 843147
Join ZOOM Meeting Link :
https://bit.ly/3Pt4dLO

Board of Directors Meeting
Wednesday, May 21, 2025
1900 Hours
W2MMD Clubhouse

"Ask not what your Club can do for you, Ask what you can do for your Club"
- KA2OSV

"There's More To Ham Radio Than You Can Possibly Do!"
- K3TS

*** Badges ***

Need a new or replacement badge
Contact "*The Badge Man*"

Chris Prioli, AD2CS
chris@ad2cs.com

Question Pool Answers : E2E01:B; E2E02:B; E2E03:B; E2E04:D; E2E05:A; E2E06:C; E2E07:C; E2E08:B; E2E09:D; E2E10:C; E2E11:A; E2E12:A; E2E13:D